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# Cleanings in Bee Culture





# SPECIAL BARGAINS IN SHIPPING CASES

With the bountiful crop of honey being gathered there will be need for shipping-cases in which to place the ~~comb~~ honey for market. During the past few years we have made several changes in the style of our cases, and have some stock of styles formerly made, but not now listed in our catalog. There are some people who prefer the older styles to the later ones, and there may be others who would use the older styles if bought at a low price, and prompt delivery were made. We have on hand the following stock which we offer, to close out and subject to previous sale, at the special prices here named:

- 8 crates of 50 each, 9½-inch, 2-row, at \$4.00 per crate.
- 20 crates of 50 each, 10-inch, 2-row, at \$4.00 per crate.
- 15 crates of 50 each, 6¼-in. 3-row, at \$4.00 per crate.
- 56 crates of 50 each, 12-lb. cases, at \$4.00 per crate.

All of the above have either 2 or 3 inch glass, and take 12 sections 4¼x4¼x1½ plain.

There are also for the same size section: packed 10 in a crate:

- 12 crates of 10 each, 9½-in. 2-row at 85 cts. per crate.
- 4 crates of 10 each, 6¼-inch, 3-row at 85 cts. per crate.
- 4 crates of 10 each, 10-inch, 2-row, at 85 cts. per crate.

For the 4¼ x 1½ beeway section we have:

- 15 crates of 50 each, 15¼-inch 2-row, for 15 sections, at \$4.50 per crate.
- 9 crates of 10 each, 15¼-inch, 2-row, for 15 sections, at 95 cts. per crate.
- 15 crates of 60 each, 11½-inch, 2-row, for 12 sections, at \$4.00 per crate.

- 8 crates of 10 each, 12-lb. safety cases with carton, at \$1.20 per crate.
- 5 crates of 10 each, 8-inch, 3-row, for 12 sections, at 85 cts. per crate.
- 2 crates of 50 each, 11½-inch, 4-row, for 24 sections, at \$8.00 per crate.
- 2 crates of 10 each, 12-inch, 4-row, for 24 sections, at \$1.80 per crate.

For 24 sections, 4¼ x 1½ plain:

- 5 crates of 25 each, 9½-inch, 4-row, at \$4.00 per crate.
- 2 crates of 10 each, 9½-inch, 4-row, at \$1.75 per crate.
- 3 crates of 10 each, 10-inch, 4-row, at \$1.75 per crate.

For 12 sections 4 x 5 x 1½ :

- 37 crates of 50 each, 3-row cases, at \$4.00 per crate.
- 3 crates of 50 each, 3-row for 15 sections, at \$4.00 per crate.

For 12 sections, 8½ x 5 x 1½ :

- 6 crates of 10 each, 3-row cases at 85 cts. per crate.

**THE A. I. ROOT COMPANY, MEDINA, OHIO**

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I was head queen-breeder for The A. I. Root Co. for a number of years, and during that time I originated the famous \$200 ROOT BREEDER whose stock has gone the world around. These bees for GENTLENESS. GENERAL VIGOR, and HONEY-GATHERING qualities have ESTABLISHED A REPUTATION. I have been for years developing and perfecting this same strain. While my prices may be higher than some others, my queens are cheap in comparison with their value.

Untested	- - -	during June, \$1.50; in July, August, and September, \$1.00
Select Untested	- - -	1.75 " " " 1.25
Tested	- - -	2.50 " " " 2.00
Select Tested	- - -	3.50 " " " 3.00

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## EMBARGO ON BEE SUPPLIES

Pennsylvania, New Jersey, New York, and New England states beekeepers should not delay putting in their stock of supplies as early as possible. The eastern railroads are so heavily laden with freight it is indefinite as to just how long it will take to receive goods after they leave the factory or dealer. Ordering your requirements a month earlier than usual will cost no more, and will assure you of having supplies on hand when the time comes to use them. This will allow for any delay which might occur in transit.

As never before we are especially prepared to take care of the beekeepers' orders and give prompt service. Above all, we assure the purchaser of satisfaction, and we never consider a deal closed until we feel sure our customer has received the guarantee of satisfaction which goes with every package, crate, or box leaving our factory.

Those beekeepers who have not received a copy of our new RED CATALOG should not hesitate to send for a copy. It gives descriptions and prices of all the beekeepers' supplies, from the requirement of the smallest to that of the largest beekeeper. A postcard will bring it to your address free.

Red Catalog, postpaid.

Dealers Everywhere.

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**W. T. FALCONER MFG. COMPANY, FALCONER, NEW YORK**

where the good beehives come from.

## HONEY GRADING RULES

### GRADING RULES OF THE A. I. ROOT COMPANY, MEDINA, OHIO.

In harmony with the Federal net-weight regulations and the statutes of many states, all comb honey we handle is figured with the weight of the section box as well as the case excluded. To get the net weight, deduct the weight of the empty case and 1 lb. 8 oz. for the weight of 24 sections (1 oz. each).

#### COMB HONEY.

**Extra Fancy.**—Sections to be evenly filled, combs firmly attached to the four sides, the sections to be free from propolis or other pronounced stain, combs and cappings white, and not more than six unsealed cells on either side. No section in this grade to weigh less than 14 oz. net. Cases must average not less than 22 lbs. net.

**Fancy.**—Sections to be evenly filled, comb firmly attached to the four sides, the sections free from propolis or other pronounced stain; comb and cappings white, and not more than six unsealed cells on either side exclusive of the outside row. No section in this grade to weigh less than 13 oz. net. Cases must average not less than 21 lbs. net.

**No. 1.**—Sections to be evenly filled, comb firmly attached to the four sides, the sections free from propolis or other pronounced stain; comb and cappings white to slightly off color, and not more than 40 unsealed cells, exclusive of the outside row. No section in this grade to weigh less than 11 oz.

**No. 2.**—Combs not projecting beyond the box, attached to the sides not less than two-thirds of the way around, and not more than

60 unsealed cells exclusive of the row adjacent to the box. No section in this grade to weigh less than 10 oz. net. Cases must average not less than 18 lbs. net.

#### CULL COMB HONEY.

Cull honey shall consist of the following: Honey packed in soiled second-hand cases or that in badly stained or propolized sections; sections containing pollen, honey-dew honey, honey showing signs of granulation, poorly ripened, sour or "weeping" honey; sections with combs projecting beyond the box or well attached to the box less than two-thirds the distance around its inner surface; sections with more than 60 unsealed cells, exclusive of the row adjacent to the box; leaking, injured, or patched-up sections; sections weighing less than 10 oz. net.

#### EXTRACTED HONEY.

This must be well ripened, weighing not less than 12 lbs. per gallon. It must be well strained; and, if packed in five-gallon cans, each can shall contain sixty pounds. The top of each five-gallon can shall be stamped and labeled, "Net weight not less than 60 lbs." Bright clean cans that previously contained clean light honey may be used for extracted honey.

#### EXTRACTED HONEY NOT PERMITTED IN SHIPPING GRADES.

Extracted honey packed in second-hand cans, except as permitted above.

Unripe or fermenting honey, or weighing less than 12 lbs. per gallon.

Honey contaminated by excessive use of smoke.

Honey contaminated by honey-dew.

Honey not properly strained.

GRADING RULES OF THE COLORADO HONEY-PRODUCERS' ASSOCIATION, DENVER, COL.,  
FEBRUARY 6, 1915.

COMB HONEY.

FANCY.—Sections to be well filled, combs firmly attached on all sides and evenly capped except the outside row next to the wood. Honey, comb, and cappings white, or slightly off color; combs not projecting beyond the wood; sections to be well cleaned. No section in this grade to weigh less than 11 oz. net or 13½ gross. The top of each section in this grade must be stamped, "Net weight not less than 12½ oz."

The front sections in each case must be of uniform color and finish, and shall be a true representative of the contents of the case.

NUMBER ONE.—Sections to be well filled, combs firmly attached, not projecting beyond the wood, and entirely capped except the outside row next to the wood. Honey, comb, and cappings from white to light amber in color; sections to be well cleaned. No section in this grade to weigh less than 11 oz. net or 12 oz. gross. The top of each section in this grade must be stamped, "Net weight not less than 11 oz." The front sections in each case must be of uniform color and finish, and shall be a true representation of the contents of the case.

NUMBER TWO.—This grade is composed of sections that are entirely capped except row next to the wood, weighing not less than 10 oz. net or 11 oz. gross; also of such sections as weigh 11 oz. net or 12 oz. gross, or more, and have not more than 50 uncapped cells all together, which must be filled with honey; honey, comb, and cappings from white to amber in color; sections to be well cleaned. The top of each section in this grade must be stamped, "Net weight not less than 10 oz." The front sections in each case must be of uniform color and finish, and shall be a true representation of the contents of the case.

*Comb honey that is not permitted in shipping grades*

Honey packed in second-hand cases.  
Honey in badly stained or mildewed sections.  
Honey showing signs of granulation.  
Leaking, injured, or patched-up sections.  
Sections containing honey-dew.  
Sections with more than 50 uncapped cells, or a less number of empty cells.  
Sections weighing less than the minimum weight.  
All such honey should be disposed of in the home market.

EXTRACTED HONEY

This must be thoroly ripened, weighing not less than 12 pounds per gallon. It must be well strained, and packed in new cans; sixty pounds shall be packed in each five-gallon can, and the top of each five-gallon can shall be stamped or labeled, "Net weight not less than 60 lbs."

Extracted honey is classed as white, light amber, and amber. The letters "W," "L A," "A" should be used in designating color; and these letters should be stamped on top of each can. Extracted honey for shipping must be packed in new substantial cases of proper size.

EXTRACTED HONEY.

This must be well ripened, weighing not less than 12 pounds per gallon. It must be well strained; and, if packed in five-gallon cans, each can shall contain sixty pounds. The top of each five-gallon can shall be stamped and labeled, "Net weight not less than 60 lbs." Bright clean cans that previously contained honey may be used for strained honey.

*Honey not permitted in shipping grades.*

Extracted honey packed in second-hand cans.  
Unripe or fermenting honey weighing less than 12 lbs. per gallon.  
Honey contaminated by excessive use of smoke.  
Honey contaminated by honey-dew.  
Honey not properly strained.

## YOU DON'T WAIT FOR MONEY WHEN YOU SHIP MUTH YOUR HONEY

### We Remit the Day Shipments Arrive.

We are in the market to buy FANCY AND NUMBER ONE WHITE COMB HONEY, in no-drip glass front cases. Tell us what you have to offer and name your price delivered here.

Will also buy—

White Clover extracted and Amber extracted.  
A few cars of California Water White Sage.  
A few cars of California Orange Blossom.

When offering extracted honey mail us a sample and give your lowest price delivered here, we buy every time you name a good price.


We do beeswax rendering; ship us your old combs and cappings. Write us for terms.

**THE FRED. W. MUTH CO.**  
"THE BUSY BEE MEN"


204 Walnut Street.

CINCINNATI, O.





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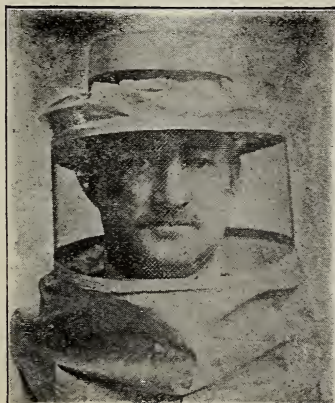
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Muth's Ideal Bee-veil, postpaid 75c;  
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OLD COMB AND CAPPINGS rendered  
into wax with our hydraulic wax-press.  
Perfect work. We buy your wax at high-  
est market price. Write us.

**THE FRED W. MUTH CO.**  
204 Walnut Street      Cincinnati, Ohio



# Gleanings in Bee Culture

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## HONEY MARKETS

The prices listed below are intended to represent, as nearly as possible, the average market prices at which honey and beeswax are selling at the time of the report in the city mentioned. Unless otherwise stated, this is the price at which sales are being made by commission merchants or by producers direct to the retail merchants. When sales are made by commission merchants the usual commission (from five to ten per cent), cartage, and freight will be deducted; and in addition there is often a charge for storage by the commission merchant. When sales are made by the producer direct to the retailer, commission and storage and other charges are eliminated. Sales made to wholesale houses are usually about ten per cent less than those to retail merchants.

CHICAGO.—For the past month there has been little doing in honey, so that a market price is really a difficult thing to quote, as parties who have carried over their honey are accepting what they are offered. We look for new comb honey to sell at about 13 cts. per lb. for the best grades of white, and for the time being the ambers may bring nearly as much, as there does not seem to be much of that in the market. Extracted ranges from 7 to 8 for the white and 6 to 7 for the amber. Very little of the harvest of 1916 is on this market, and what there is has not been sold. The weather now being warm, the retail trade are not endeavoring to sell. Beeswax is bringing 28 to 30, according to color and cleanliness. Chicago, July 18. R. A. BURNETT & Co.

ALBANY AND SCHENECTADY.—There is no new comb honey in our market yet, and stock of last season closed out. Some producers have offered us light extracted in 60-lb. cans, but there is no demand as yet. The present outlook for white honey is reported good. We could sell some No. 1 comb in a small way, but there is no established price yet. We think, however, it would bring 15.

CHAS. MACCULLOCH.

Albany and Schenectady, July 21.

KANSAS CITY.—There is a lot of native honey coming into the market now. Most of it is white clover, the best fancy white selling for \$3.50 a case, or \$3.25; No. 2, \$3.00. Last year's extracted honey, amber, sells at 6½ cts., and white clover at 8 cts. There is a fairly good demand.

C. C. CLEMONS PRODUCE CO.

Kansas City, July 20.

ST. LOUIS.—Comb honey out of season, dead dull, and none selling. Some little inquiry and movement in extracted honey with market for this grade improving. Extracted honey ranges in price from 6 cts. per lb. for dark amber to 7 cts. per lb. for light amber, according to color, quality, and quantity. Comb honey nominal, and ranging in price from \$2.50 to \$3.25 per case. Beeswax brings 29 cts. for price; inferior and impure, less.

R. HARTMANN PRODUCE CO.

St. Louis, July 20.

DENVER.—New crop comb honey is selling in the local market at the following jobbing prices: Fancy, per case of 24 sections, \$3.38; No. 1, \$3.15; No. 2, \$2.93. White extracted, 8½ to 8¾ cts. per lb.; light amber, 8 to 8¾ cts. per lb., and amber, 7 to 8 cts. per lb. We pay 26 cts. per lb. in cash and 28 cts. per lb. in trade for clean, average yellow beeswax delivered here.

THE COLORADO HONEY-PRODUCERS' ASSOCIATION,  
Denver, July 22. Frank Rauchfuss, Mgr.

**For Sale** Bee supply and honey business. Established more than a quarter of a century. Splendid location. Rare opportunity for the right man. Big money-maker. For information, address J. W. HARRINGTON, 1506 Mechanics Bank Bldg., Indianapolis, Ind.

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## Queens of MOORE'S STRAIN of Italians PRODUCE WORKERS

That fill the super quick with honey nice and thick. They have won a world-wide reputation for honey-gathering, hardiness, gentleness, etc. Untested queens, 1, \$1; 6, \$5; 12, \$9; 100, \$65. Select untested, 1, \$1.25; 6, \$6; 12, \$11; 100, \$75. Safe arrival and satisfaction guaranteed. I am now filling orders by return mail.

Circular free.  
Queen-breeder

J. P. MOORE,  
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# Preparedness!

Your success this season, Mr. Beekeeper, depends on being ready. You need to buy your supplies now.

Root's Goods mean Real Preparedness.

We sell them in Michigan. Send for catalog. Beeswax wanted---

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M. H. Hunt & Son, 510 Cedar St. N., Lansing, Mich.

## "If Goods are Wanted Quick Send to Indianapolis"

Indications just now are very favorable for a good season; but we are, of course, at the mercy of the weather conditions. A good season means an excessive demand for the line which we handle, and we mention this, urging our friends to place their orders before the goods are really needed, that none may be disappointed.

We carry Root's goods and sell at their prices; and considering this as a shipping-point, we can save you time and freight by having your orders come to this house.

If you are new to the business we should like to explain that Root's goods are the very best that can be produced. If you have been using THE ROOT LINE you will recognize the truthfulness of the above and will want more of the same goods.

Promptness in filling orders is the motto here. We also give small orders the same careful attention that are given to large orders.

Let us have the pleasure of mailing you our free catalog.

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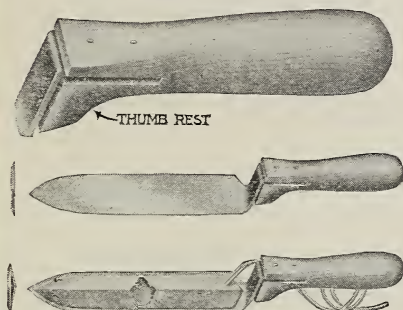
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873 Massachusetts Avenue



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with the New Improved Cold Handle



**A. G. WOODMAN COMPANY**  
Grand Rapids, Michigan

Standard length, 8½ in.; 75 cts.; ship. wt., 15 oz.  
Extra long, 10-inch; each, 85 cts.; ship. wt., 16 oz.  
Steam-heated with 3 ft. tubing, \$2.50; ship. wt. 24 oz.

Our knives are made of the best razor steel, and we could produce them at least 10 cts. per knife cheaper by using inferior material. Mr. W. W. Culver, of Calexico, Cal., writes, "We have had difficulty in getting Bingham knives, such as we are accustomed to—that is, a light flexible knife that will give somewhat in moving the comb. If you can furnish such a knife, send two standard and one steam knife. If the steam knife suits me I shall want about three." This is just the kind of knife we furnish, the kind Mr. Bingham furnished years ago, before others crowded him out with their inferior substitutes. We know, because we have kept bees nearly 40 years. Old timers will again find what they want in our Bingham knife.

## Tin Honey-cans---Low Prices

Five-pound Friction-top pails, lots of 50, \$3.25; 100, \$5.35; 203, \$10.35; 1015, \$50.00.

Ten-pound Friction-top pails, lots of 50, \$4.30; 100, \$7.60; 113, \$8.35; 565, \$40.00.

Sixty-pound cans, two in a case, 70 cts. per case; over 10 cases, 69 cts; 25 cases, 68 cts.; 50 cases, 67 cts.; 100 cases, 65 cts. per case.

All F. O. B. Chicago, Ill.

We are making prompt shipments.

## For New England

Beekeepers, we have everything you need in the way of supplies. Remember we are in the shipping center of New England. Let me send you a new catalog.

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Apiaries, Glen Cove, L. I.

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Chas. J. Williamson, McLachlan Building  
WASHINGTON, D. C.

## LOS ANGELES HONEY CO.

633 Central Bldg. . . . Los Angeles, Cal.

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of Honey and Wax

Write Us for Prices when in the Market



Established 1885

A great honey crop is in sight for 1916. If you are needing hives, sections, foundation, and other bee supplies, send at once for our large catalog, full of information. We carry a good assortment of supplies for prompt shipment. Beeswax wanted for supplies or cash.

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Montgomery County

For Quick Shipments  
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Ogden, Utah

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## Your Honey Crop

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The Embryology of the Honey Bee

By Dr. Jas. A. Nelson

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Clubbed with "Gleanings" one year, \$2.75

THE A. I. ROOT COMPANY  
Address the Medina Office

# Gleanings in Bee Culture

DEVOTED TO HONEY, BEES, AND HOME INTERESTS

Established 1873

Issued semi-monthly

## ADVERTISING RATES

Based on 20,000 circulation guaranteed.

Display, per agate line, flat, 15 cts.

Quarter page, \$8.00.

Half page, \$15.00.

Full page, \$30.00.

Outside back cover page, 25 per cent additional.

Special and guaranteed positions, 25 per cent to 50 per cent additional.

Classified, per counted line, flat 25 cts.

(Discounts on classified advertising: 10 per cent on 6 continuous insertions; 15 per cent on 12 continuous insertions; 25 per cent on 24 continuous insertions.)

Cash discount if paid in 10 days, 2 per cent.

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THE A. I. ROOT COMPANY, Publishers  
MEDINA, OHIO

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# Wanted---Honey

## Both Comb and Extracted

If comb honey, state grade and how it is put up, and your lowest price delivered Cincinnati.

Extracted honey, mail a fair-sized sample, state how it is put up, and your lowest price delivered Cincinnati.

If prices are right we can use unlimited quantities.

---

C. H. W. Weber & Company, Cincinnati, O.

2146 Central Avenue

## What do you know about that

We are getting an almost innumerable number of orders to go by parcel post --- a great thing for beekeepers on rural delivery. BUT REMEMBER to always include enough in the amount sent to cover the postage required. . . .

For instance, if you are within 150 miles of Syracuse, and need 500 sections, we can mail them for 41c; 250 sections for 21c, and 100 sections for 11c. Foundation in 5-lb. lots, can be mailed for 11c; 2 lbs. for 7c; 1 lb. for 6c. Always figure postage more than foundation weighs. Rates inside of 150 miles once the total weight plus 4.

---

F. A. SALISBURY, Syracuse, New York

1631 West Genesee St.



# Nominated by Acclamation

## Lewis Sections

The kind that does not break in folding

Beekeepers everywhere, no matter what their preference may be for hives or special apparatus, agree that when it comes to sections that

**There are no sections like Lewis Sections!**

**WHY IS THIS TRUE?** BECAUSE LEWIS SECTIONS are made of Wisconsin basswood—the best material for sections—out of carefully selected white stock. The V groove which allows the sections to fold is scientifically made. LEWIS SECTIONS are polished on both sides and are neatly and accurately packed in a tight wooden box, insuring delivery in good order.

At the same price you pay for other standard makes of sections you get all of the above. The making of Lewis Sections has been under the supervision of a Lewis section expert who has "been at it" for over thirty years. No wonder Lewis Sections are perfect. One of our customers tells us that he has put up (folded) thirty thousand Lewis sections in a season, and has not found one section in the whole lot that was not perfect. Can we mention any more convincing evidence of quality? Can you say the same of even five hundred of any other make?

**INSIST ON LEWIS SECTIONS. LOOK FOR THE BEEWARE BRAND.**

**G. B. Lewis Company, Watertown, Wisconsin**

Catalog on request giving nearest distributor.

# DO YOU WANT Your Bee Supplies Shipped Promptly?

We carry from four to six carloads of the finest BEEWARE on hand at all times, and can fill your orders without delay. . . . BEE-HIVES, SECTIONS, Shipping-cases, Tin Cans, and all other Bee Supplies; also

## Dadant's Foundation

by return freight, mail, or express

DADANT & SONS, Hamilton, Ill. Dear Sirs:—The box of foundation arrived a few days ago in fine condition. I have kept bees for over thirty years, and have purchased foundation from many firms, and must say that your foundation is the nicest that I have ever used, and I wish to thank you for the prompt shipment and large amount of wax you secured for me.

A. W. DARBY, Alburg, Vt., May 3, 1916.

We have forty years' experience and thousands of satisfied customers. Are you one of them?

## Dadant & Sons, Hamilton, Illinois

# GLEANINGS IN BEE CULTURE

Published by The A. I. Root Co., Medina, Ohio. ●

E. R. Root, Editor

A. I. Root, Editor Home Department

H. H. Root, Managing Editor

J. T. CALVERT, Business Manager

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AUGUST 1, 1916

NO. 15

## EDITORIAL

IN our issue for July 1 we should have made special mention of the article by H. H. McIntyre on how to get all the honey from the cappings. There is another article that deserves special mention—the one by G. A. Deadman on a plan for cleaning honey-combs after extracting. If the reader has not already read these two articles he should do it yet.

### Idiosyncrasies of the Clover Flow

IN our locality, which is dryer than most places in the United States, the clover yield has been somewhat fitful. Bees would be idle until about noon, and then they would get busy again as the day wore on. Our extracting had to be postponed in some cases on this account. There would be nothing doing in the morning; but in the afternoon the combs began to show raw nectar.

In some localities the bees will be busy all day. In one place in particular they will bring in more honey in the morning than in the afternoon; and the suggestion has been made that perhaps the bees stay out all night because they are too far away to get home; and when the sun is up they hike for home with a big load of nectar.

### The Net-weight Law, Again

QUESTIONS continue to come in about this law, and we are obliged to repeat that it is not necessary to mark the net-weight on honey sold around home and within the state, provided, of course, there is no state law requiring the marking of net weights. But we advise every one to mark the minimum net weight on their sections and to see that all labels on glass or tin packages show the net weight in pounds and ounces. Do not make the mistake, for example, of saying "17 ounces." but say, instead, "1 lb. and 1 oz."

It is not necessary, as we understand the

ruling, to mark the net weight on a whole shipping-case of honey; but as a matter of expediency we advise it. This net weight must be exclusive of the weight of one ounce for each section in the case and the case itself. Better not mark at all than to mark it wrong.

### Preparedness against Bee Disease

THE other day as we were going over a set of combs to give to a swarm we found one in which brood had died the previous season. The yard from which it came indicated that it was only a case of chilled brood; but it had somewhat the appearance of a comb that formerly contained American foul brood; and had we not known the prior conditions we might have been in doubt. Even as it was, we instructed the boys to burn all such combs, in view of the danger that was possible tho remote.

Foul brood of either kind in a beeyard is an expensive proposition at best. Moreover, a comb that is smeared up, and has the carcasses of dead brood in it, will be an ideal place for the propagation of bee disease provided that the germs were already in the apiary, or, we will say, in the hives. In this day and age one cannot afford to use anything but good clean combs, and that means that all combs when put away in the fall should be carefully inspected and put into bee-tight compartments, hive-bodies provided with cover and bottom.

### Importance of Advertising and Introducing Honey into the Family

THE reader's attention is called to the wealth of reading-matter on the subject of marketing honey, in this issue. We have tried to cover every phase of it. This year of all years it is important to know how and when to sell honey, because it will prob-

ably go down in history as one of the greatest if not the very greatest clover year ever known. It will, therefore, be necessary for all of us to get busy in getting honey introduced, especially at this time, when complaint is made that sugar is abnormally and perhaps unnecessarily high. The producer who will not take advantage of the situation of the high price of sugar is losing the opportunity of his life to introduce his product to his neighbors. If it can once be introduced into a family, its use will continue year after year. Don't miss the opportunity that may not come back again in a decade.

### "Safe Arrival Guaranteed"

THIS is a phrase that is used in advertising that too often does not mean what it says. Worse yet, there are other times when no guarantee of any sort is stated, and the prices are made very low.

A customer recently complained that an advertiser sent him a nucleus containing wormy combs, old-style and rotten frames, and on top of it all the shipment arrived in bad order. The customer complained, but the shipper came back with the statement that his prices were very low, and therefore he could not afford to guarantee safe arrival nor replace the wormy combs.

It is the usual custom, in the delivery of bees and queens, to guarantee satisfaction and safe arrival. This puts up to the shipper the responsibility of making a package of bees that is up to a standard. If the carrier is responsible for delay or breakage, it should be up to the shipper to seek damages from the carrier. If the shipper does not guarantee safe arrival it will make no difference to him what kind of package he uses; and, no matter in what condition the bees arrive, he will come back with the statement that "it was not my fault." This is precisely what some are saying.

Another year, if we know ourselves, advertisers for bees and queens, in order to get in our columns, must put up a guarantee to meet certain specifications. Among them shall be safe arrival, good stock, good frames, good combs, from a yard free from disease or hybrid stock, and everything as represented. To ship hybrid bees for Italians or to send bees out of a yard that has foul brood, or to send bees two or three weeks after the time promised, to send poor or wormy combs—any and all of these things are a vexation, and lead to no end of controversy in which the publisher is involved sooner or later.

Those who are seeking to buy bees, if lured by low prices, should first ascertain whether those prices cover a suitable guarantee of quality and delivery. To receive a shipment of bees in combless packages, a third or a half of them dead, is making a very poor delivery. Our experience shows that when a third of them are dead a large number more will die soon after putting them in the hive. The prospective buyer should find out exactly what the shipper will do in the case just cited. He will do a whole lot more when he is seeking business, and wants the cash, than after he has got the cash in his pockets. Don't forget that.

### Honey-crop Conditions and Prices

REPORTS from the clover districts of the United States continue to be favorable. Clover honey at this writing, July 24, is still coming in, in most places, and it appears as if the flow might hang on for some days yet. While early in June we were getting too much rain, and were hoping we might have some dry weather, we are now getting to the point where there is too much of drouth, and we are now wishing for rain. A survey of the government weather maps shows there have been thunderstorms in many localities that will give a new lease of life to clover; but in most places a little more rain would be very helpful.

The reports show one, two, three, and even four supers of clover honey already on the hives, and more coming in. Out of all the letters received there is only one report of failure.

Clover seems to be yielding well, from Maine to the Dakotas, and from the northern states clear down to Tennessee. It began yielding in June, and in many localities it will be furnishing some honey even up to the first of August. This probably means an enormous crop of clover honey.

Late reports indicate that alfalfa areas may not come up to their usual average; but these reports are so meager that no definite statement can as yet be made.

The high price of sugar and the slight shortage in the alfalfa regions may have a tendency to hold up the prices on honey; but the probabilities are they will be easier than last year at this time.

To help stem the tide of a possible and probable drop in prices the A. I. Root Company has entered on a vigorous campaign of honey advertising. This will begin at an early date and primarily is intended to stimulate a demand for honey and to educate people to eat more honey. Now



that the price of sugar is soaring, we think it will set the good housewife to thinking. See later editorials for further particulars in regard to this campaign.

In the mean time, clover-honey producers should advertise honey in all their local papers. Get your customers to thinking about honey for general use, for canning fruit, as a table delicacy, and as an important food.

### **Railroads Discriminate against Comb Honey in Western Territory**

IN the new issue of the Western Classification, becoming effective September 1, and applying to territory west of Chicago and the Mississippi River, we discover that the rate on comb honey has been raised to double first-class, which means that all local shipments of comb honey, in the territory affected, of 100 pounds or more, and less than a carload, for longer or shorter distances, will have to pay double the freight after Sept. 1.

Without question the careless packers and shippers of comb honey are responsible for this advance in rate, and it seems decidedly unfair to those who put their honey in cartons or partitioned cases and then pack the cases in carriers, that they should have to suffer the penalty of paying such excessive freight charges, because of the large claims on comb honey improperly packed and shipped.

This question was up before the Western Classification Committee two years ago. At that time they proposed making the rate three times first-class. We learned of the proposed change before the meeting of the Committee, and arranged for a hearing. As a result of this hearing the rate was left unchanged; but we were given to understand that unless there was a decided reform in the method of packing and shipping comb honey, so as to reduce the number and amount of claims entered against the railway companies for breakage, they would be compelled later to make a change in the classification.

We have since then uttered repeated warnings, and have endeavored to institute a reform in the method of packing comb honey; but there have been too many penny-wise-and-pound-foolish producers who were not willing to pay the price of adequate protection to their very fragile product, and as a result all producers of comb honey must suffer by paying a double freight charge on all local shipments.

But we need not accept without protest the ruling of the Western Classification

Committee. In the Official Classification governing the territory east of Chicago and the Mississippi and north of the Ohio, comb honey protected by carriers is carried at second-class rate. If the producers and associations of beekeepers interested will take prompt and united action, and will write to R. C. Fyfe, Chairman of the Western Classification Committee, Transportation Building, Chicago, Ill., protesting against the discrimination, and asking for provision for a lower rate on comb honey properly packed and protected for shipment, we may still hope to obtain some redress.

### **Hand Extracting vs. Power Extracting; a Small Extracting-outfit at Every Outyard, vs. One Large One at the Home Yard**

THESE two questions will invariably come up in the mind of every producer of extracted honey with outyards. There are some who believe it is more economical and more satisfactory to have a hand-power extracting-outfit at each yard. But there is another class, and it is growing larger, who believe it is more economical to have one large power outfit at home, and haul the combs from the outyard to the home yard, extract and return. One strong argument in favor of the latter is that the large outfit will do a more thoro and much cleaner job. We have definitely proven that a hand-driven machine cannot extract as clean as a power outfit.

Again, the conditions at the outyard are not usually favorable so far as a building is concerned for extracting. Practically all the work will have to be done in a small outbuilding or under a tent. If the extracting is near the close of the season, robbers will be ever present and annoying. Besides, they will be the cause of a general uproar in the yard. On the other hand, if the combs are taken from the hives and freed from bees they can be put into extracting-supers hauled home, and brought back again in very short order. Two men going with an automobile truck will clear the combs of bees while an extracting force at home can have a set of empties to send back; but suppose there are only two men to do the work. The combs can be shaken at an outyard, taken away late in the day, extracted, and brought back some time the next day.

The objection has been made that the central extracting-outfit at the home yard will cause more or less of a mix-up of

combs from the different yards, involving a risk of bee disease if one yard has foul brood. This does not necessarily follow. The combs of an individual yard can be kept separate with a central outfit for extracting, but it will be necessary to wash out and clean thoroly the extractor and the tools for doing the work for each individual yard. They ought to be cleaned anyway, and hence the risk of bee disease will be no greater in the one case than in the other.

We have been in quite a number of extracting-yards where a little outfit was used in each yard. Some of the worst robbing fracasces we have ever seen was where extracting was carried on in an outyard building or under a tent, and where it was practically impossible to screen out robbers. When we consider the further fact that a central outfit will extract ten per cent more honey, the outyard operator can hardly afford to consider the individual outfit.

Of course, where one has only one apiary, and does not expect to make a very large increase, a small hand-power outfit is the only thing that can be or should be considered.

=====

### Is it Possible to Secure Samples of Honey Each from One Individual Source, without Admixture from Some Other Source?

A CORRESPONDENT has written, saying he would like to secure several samples of clover, basswood, alfalfa, mountain sage, orange, buckwheat, each without the mixture of any other honey, for exhibition purposes at this county fair. He wishes to know how many of these he could secure, and how he could vouch for each being free from any other honey. For his benefit and that of others, it may be well to make a general statement.

Most years, and especially this year, it would be possible to secure a pure clover honey. Indeed, where there is no alsike grown one may be able to get a pure white clover; but as a general thing clover would include alsike and white, with a little of red, perhaps. Some years it is possible to secure a pure basswood; but usually it will have a little admixture of clover, because in most localities basswood begins before clover is over. But the aromatic flavor of basswood is so pronounced that if it is two-thirds basswood and one-third clover it would naturally be classed as a basswood honey. Generally speaking, we would say it would be difficult to get a pure basswood without clover; but for educational purposes a sample of honey that is largely basswood

would answer quite as well as one that is basswood only. The same statement might be made concerning buckwheat. The flavor is very pronounced; and even if there is an admixture of aster, goldenrod, or clover, if it is two-thirds buckwheat it will be classed as a buckwheat; but we doubt very much if there is any such thing as pure buckwheat honey, as there will probably be something else in bloom either at the beginning or at the close of the buckwheat flow.

A pure alfalfa honey can be secured in many localities; for when alfalfa is the only source of nectar it can be had in all its purity. The same may be said of mountain sage up in the mountains, because nothing else may be in bloom at the time, altho there may be alfalfa in the valleys, and orange in the groves. Mountain sage, while largely such, may contain some orange and perhaps a little alfalfa.

There are some seasons and some localities where pure orange honey can be produced. Last year Prof. Baldwin, at De Land, Fla., produced an orange honey that was as nearly pure as it is possible to secure, and it was indeed a beautiful honey. But usually orange will have a little of palmetto, and perhaps a little gallberry. Orange in California will have both alfalfa and perhaps a little mountain sage, altho there are seasons and localities in California when the pure article can be produced.

When it comes to the fall honeys, they are generally mixtures of everything. In our locality the asters and goldenrods will have a little buckwheat, and perhaps a little second crop of red clover. There are some localities in the western states where pure heartsease may be secured; but heartsease will generally have a little aster and goldenrod mixed with it.

For general trade purposes we would say that a honey that is two-thirds basswood, two-thirds sage, two-thirds orange, two-thirds alfalfa, could be sold under the name of the two-thirds source. For example, a basswood that was made up of one-third of other honey could be sold as basswood, because it is very difficult to get basswood that does not have at least some other source. Whether it would be safe to bottle honey and label it as a basswood under the federal law we do not know. Generally it is wiser to err on the safe side, and call the honey somebody's brand of pure extracted, not naming the exact source. As a rule it is not possible to secure, year in and year out, any one flavor; and large bottlers are in the habit of making up a blend of several pure honeys and keeping that blend entirely uniform from year to year.



Dr. C. C. Miller

## STRAY STRAWS

Marengo, Ill.



MRS. ALLEN wonders, page 522, whether bees would suffer drones in a super till the general drone-slaughter. In cases I have known, whether it was the indoor confinement, or whether they were starved by the bees, it was not long before they were all gone, and nothing left of them except their polished thoraxes lying on the excluder.

"AN ORDINARY frame of sealed brood" is pictured on p. 488. Is that a fair sample taken from a good colony in the height of the breeding season? So many unsealed cells among the sealed do not seem entirely satisfactory, altho it may be all right if the picture be taken rather late in the season, when laying has become more scattered. At any rate, such a frame is hardly the ordinary thing in my hives in June. [The comb was not shown because it was perfect or normal for the time of year, but because it showed all kinds of brood, worker and drone, sealed and unsealed. Perhaps we ought to have had another frame showing all the cells sealed. But our main purpose was to illustrate to the novice the difference between the different kinds of brood. Perhaps the word "ordinary" is not quite the correct qualifying adjective. We will change it when it comes out in book form.—ED.]

THE last paragraph, p. 549, intimates that when a queen becomes a drone-layer she lays two and three eggs in a cell. I wonder. I'll tell you what I think, subject to correction. When a queen becomes a drone-layer she has the same instincts as before, will lay in the same kind of cells, and the same number of eggs, only they'll all produce drones. A laying worker seems to consult her own comfort, and prefers the larger cells because more comfortable. (I saw one once laying an egg in a worker-cell, and her wings were crowded up about her head so uncomfortably that I don't wonder she should want a larger cell.) So when each drone-cell has an egg she prefers to duplicate them rather than to use a worker-cell. A queen-cell is still more comfortable, and three times as many eggs may be found in a queen-cell as in a drone-cell. But when scarcity of larger cells obliges laying workers to use worker-cells, there's one egg in a cell; and until the cells are sealed you can't tell the work from that of the best queen. At least that's the way "in this locality." [When we read over your first sentence, referring to page 549, we felt

sure you must be referring to some correspondent, because we certainly believed just what you say; but when examination showed that you were referring to our own statement, we have to confess we did not say what we meant, because we had in mind laying workers. It is true, just as you say, that a laying queen that turns drone-layer does not lay eggs like a laying worker; but a queen that never met a drone, and never laid worker eggs, will behave very much like a laying worker. Thanks for your correction.—ED.]

"RELIABLE estimates show that the total amount of honey produced is not far from 200 million pounds," page 547. That sounds like such an enormous quantity it seems there must be some mistake about it. But when we remember that that's to feed a hundred million people, what a stingy morsel it is! Less than a tenth of an ounce a day for each individual! My daily ration is 15 to 30 times that much, and I'm a very small eater. The average beekeeper does a lot of grumbling because he isn't better paid, and I don't know that I blame him. But let him take comfort in the thought that he's engaged in a work of true philanthropy with every pound of honey he produces, in helping to bring up the annual average from 2 pounds to 50 or more. I'm not getting rich producing honey, but I'm taking pride in knowing that I'm doing my little share toward making the people of this country just a little healthier and happier because of the honey they eat. [The government census shows 100,000,000 lbs.; but from reliable data it is very evident that it would be safe to double these figures and make it 200,000,000. The census took no account of beemen in cities and towns, and many of the large producers live in town but operate their outyards at points remote from town. Furthermore, the canvass at conventions and elsewhere shows that some of the large producers furnished no figures nor estimates to the census enumerators. This year we shall not be surprised if the actual gain in honey would be nearer 400,000,000 lbs.]

Yes, it is a comforting thought to feel that, while we are not only getting a living out of our bees, we are helping other people to live longer. When the world wakes up to the fact that the carbohydrates are energy-producers, and that honey stands at the top of the list, and that it is partially digested, the demand will be a great deal larger than it is now.—ED.]



Grace Allen

## THE DIXIE BEE

Nashville, Tenn.



Well, Dr. Miller, I surely thought it was the little bee's antennæ that held that tiny egg that blew away so quickly. The mistake, as you suggest, must have been due to inaccurate observation, for it was not mere careless reporting. Thanks for the correction, tho it does force me to un-see what I seem to see very clearly in my mind's eye.

One thing that I *have* seen accurately, tho, and as you see it, is the beauty of the dandelion. I am glad you love it too. A field of them is so beautiful that history's famous Field of the Cloth of Gold on which the two great kings met seems a dead unthrilling thing by contrast.

\* \* \*

As to the queen's preference for new comb, we have often remarked it, having frequently found the queen laying in comb only partly drawn, even when not forced to it by lack of room.

\* \* \*

Mr. Scholl says, page 471, "It is possible to take off more than a thousand pounds of honey in half an hour." My marginal comment, in the light of our own recent experiences, reads merely "Whew!" May I repeat it here? *Whe—ew!*

\* \* \*

There are certainly plenty of fine suggestions in that special advertising number—national honey week, honey stamps, and all the splendid schemes for co-operative advertising action. The next thing is the co-operation and the action.

\* \* \*

May with her lavish clover bloom raised high hopes in the hearts of Tennessee beekeepers; but June with her uncompromising rains laid them low. The crop seems to be merely an average one, probably slightly under a hundred pounds per colony, judging from reports received. Considerable of the new crop is already on the market, and the quality is unusually fine. The constant rains have interrupted many attempts at extracting, causing many beekeepers merely to mark time. The worst of this rain, tho, is the really serious damage being done further south.

\* \* \*

While Mr. Allen was carrying those heavy supers from the wheelbarrow up the steps into the house (for of course we do our extracting in the kitchen) I could do

nothing but stand by and give moral support and open the screen door; but whenever he got hold of one of the new supers, purchased this season, I could and did join him in a strenuous objection to the lack of hand-hole cleats. It seems to me that, even if I were strong enough to lift seventy or eighty pounds, I'd rather not have to do it with just the tips of my fingers.

\* \* \*

We were puzzled at finding a laying queen in one extracting-super, with brood in all stages from eggs to sealed worker brood. It is true we had raised considerable brood one time and another, but were always very particular not to put up the queen. This one we found wasn't clipped, anyway, so she almost certainly wasn't put up from below. As we sometimes failed to look later for queen-cells above, the bees might easily have reared a queen; but being over the excluder, she could not have been fertilized. Yet there were the eggs, and we are still puzzled.

Then we did a silly thing. Not knowing from which colony this particular super had come, and being rushed and busy as perhaps only backlotterers are apt to be about their extracting, we just set it out in the yard on a new stand, with its honey, brood, queen, the bees that had stayed on the combs, an entrance-contractor, and our best wishes. What the robbers did! We didn't mind their doing what robbers are supposed to do, for we had given them the chance; but they tore those combs almost completely to pieces, and we never saw the little queen again.

\* \* \*

We have good-looking covers in your sense too, Prof. Baldwin, when they are well-painted and don't look sort of speckly. They do take a deal of painting, tho, don't they? Painting every five to ten years won't do for metal covers, as Mr. Miles, page 475, says it will for hives—not, that is, to keep them looking well. The only other thing about these covers that distresses me, for I am very partial to them, is their well-developed talent for getting insufferably hot. I realize there is an air-space below; but even at that, it seems as tho when they are so hot that I can scarcely bear my hand on them, as they are in a hot sun, when unshaded, it must be decidedly and uncomfortably warm inside. We have resorted to shade-boards a few extra-warm days this season—when it didn't happen to be raining.

# NOTES FROM CANADA

J. L. Byer, Markham, Ont.



Mention was made in my last batch of notes of the fact that the acreage of buckwheat was likely to be high. With the sudden change from very wet to very dry weather, the land lying idle has baked so hard that comparatively little has been worked hard; and, as a result, the acreage of buckwheat, instead of being heavy in our locality, will actually be smaller than usual. But with the present program of 16 hours or more a day looking after the bees during clover flow, we are not doing much thinking of a possible dark-honey flow later on.

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The Weather Bureau at Toronto officially reports that we had 24 days in June in which rain fell at that station. As we are but 25 miles from that city, it is needless to say we have had all the precipitation that was needed. But we have had a change just as decided, as the most anxious dry-weather wisher could have hoped for; and at this date, July 12, many are thinking that a nice shower would be acceptable again. What changeable mortals we are! and how hard to satisfy!

After all the heavy downpours of June, on June 26 here in York Co. old Sol decided to show his face, and we have now had 18 days of warm bright weather. Clover started to yield the day the weather cleared, and we have had a steady flow ever since, and a fair crop seems to be assured. No honey has come in during the forenoons, and even in afternoons the flow has never seemed to be heavy, as, for instance, in 1913. Yet the *supers seem to fill up*, and that, after all, is the most important test of a honey-flow.

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## WHAT WILL THE HARVEST BE?

Before these notes appear in print, no doubt the Honey-crop Committee will have met and considered the question of prices for the current year, and will have advised beekeepers as to their opinion in the matter. In the meantime the question of prices to ask seems to be a rather hazy proposition in the minds of many. Nearly if not all food products have gone up in price. In some cases—sugar and meats for instance—the rise is about 100 per cent over two years ago. Will honey sell at a much higher figure than it did last year—that is the question many are debating.

Present indications are that the crop will

be fair over Ontario, as the abundant rains of May and June were general, and present fine weather is also general. If people believe or can be taught that honey is a food as *cheap* as or cheaper than many other articles of diet, then honey should sell at quite an advanced figure over last year. If, on the other hand, the consumers decide that honey is a luxury rather than a food necessity, then higher prices would curtail consumption. Much will depend upon size of crop, and also on the apple crop—the latter at present looking none too good in spite of rosy prospects earlier in the season.

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## ENCROACHMENT ON BEE TERRITORY.

Page 386, May 15, Dr. Miller refers to the matter of a law in force in Australia that defines the limit for a beekeeper to place an apiary, and forbids others encroaching on such premises. Some time ago Dr. M. and yours truly had a rather verbose argument on this same question, and I suppose both chaps were of the same mind as before the discussion started. I have no desire to debate the question further at present, but simply wish to remind the good doctor that conditions are very different in Australia from those in the more closely settled parts of Canada and the United States, where so many beekeepers reside. In Australia it is a common thing in the sparsely settled districts for neighbors to be miles apart, the country being given over to ranching almost exclusively. It is easy to see how such a law as we have under discussion might be workable under such conditions, and just the opposite in a thickly settled country.

No, Dr. Miller, much as I might desire, from a selfish viewpoint, to prohibit others from keeping bees in my neighborhood, I do not for a moment see how, for any reason whatever, I could object to a man, owning property near me, keeping bees. But there are cases where *beekeepers* (by this I mean those who follow the business as a specialty) have actually started large apiaries within two miles, or even closer to apiaries of long standing. That is a different matter altogether, and often, I am compelled to admit, it would make almost any one engaged in the business wish that such a law as that mentioned might be incorporated in our statutes. But I haven't the slightest hope that such a law will ever be enacted, so I do no worrying about these things, for, after all, the *thing generally adjusts itself satisfactorily in time*.



# BEEKEEPING AMONG THE ROCKIES

Wesley Foster, Boulder, Colorado



The Boulder County Fair will be held September 5 to 8 inclusive, at Longmont, Colorado. The premiums for the Apiary Department amount to \$75.00, which is an increase of \$50.00. The amount is sufficient compared with premiums offered in other departments. The Boulder County Fair is equipped with the best buildings and grounds of any county fair in Colorado, and the attendance will undoubtedly be very large.

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Grasshoppers are reported very bad in places, and the farmers are beginning a fight on them. Alfalfa was not injured by late freezes, except in a very few localities. Horsemint was injured by freezing, however, and also suffered by the drouth in June.

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The bees were checked in their swarming preparations according to rule this year. Just as swarming was about to get under way the alfalfa was cut, and sweet clover was not yielding sufficient to keep up swarming preparations. We shall doubtless get swarms in August this year, if the flow is good, but we look for the swarming proposition to be easily controlled this season.

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The weather has been very unfavorable in Idaho, but there will doubtless be some honey produced this year for shipment. Colorado, as a whole, has had a flow from the first alfalfa, and the bees are well started in supers; if sweet clover and alfalfa will keep them going, things may come out well. A bumper crop will not be harvested unless there is a quick change in the matter of moisture.

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## SWEETEN BERRIES WITH HONEY.

The Colorado Honey-producers' Association is distributing among the fruit-grower beekeepers near Denver thousands of little slips printed with these words: "Have you ever sweetened berries with honey? If not, try it! It is delicious!" These slips are put in the bottoms of the berry-boxes; and when the berries are emptied out, there is the slip for the lady to read. It will have a wonderfully good and stimulating effect, now that the price of sugar is so high. There is no patent on the idea, and beekeepers are urged everywhere to copy it. These uses of honey, where honey is so manifestly superior to sugar, should now be pushed. Honey for sweetening coffee is fine where

the quality of honey is the best. For sweetening lemonade, honey is not as desirable as sugar, in the writer's estimation.

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## DROUTH HURTING SWEET-CLOVER FLOW.

The first crop of alfalfa is now (July 6) all put up, and sweet clover is in full bloom. The flow from the first crop was better than it has been for several years. It is exceedingly dry, and a few good rains would mean much to the beekeepers of Colorado. If we do not get rain, the yield from the second crop of alfalfa will be light and the flow from sweet clover will be very small indeed. The precipitation is about four inches below normal, and all we can depend on now is snow, which is melting very rapidly these hot days.

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## SUPERING.

It is well to remember that all comb-honey supers should go on top until the second crop of alfalfa proves what it will do in the way of nectar secretion. Lifting supers and putting empty ones beneath, during the first alfalfa flow, is poor practice with most colonies. If we had all colonies like the best, it would be different, but we never do unless we have but a few colonies. When the second alfalfa blooms, then we can judge pretty well whether supering may be liberally done. It is always safe to keep an empty super on top as a safety-valve.

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## HONEY PUBLICITY.

A few years ago the raisin-growers of California were up against a glutted market, and they began a publicity campaign, carrying it forward with such efficiency that there was no railroad running out of California but that served raisin bread, and *raisin bread only*, on their dining-cars. I have been in dining-cars when I could get no plain bread. I have never liked the raisin-growers for this, for I do not like raisins in my bread. Let them push raisin pie all they wish to, but stop putting raisins in bread for me. And I hope that honey publicity will keep fairly within the realm of common sense. I boost honey all I can; but I don't like honey in my tea, coffee, or postum, and maple syrup tastes just a little better on hot cakes than does honey—probably because we have honey on the table every meal, and maple syrup is a scarce article. There is a limit to honey publicity, and we must use it or we shall do no permanent good.



# BEEKEEPING IN CALIFORNIA

P. C. Chadwick, Redlands, Cal.



Weather conditions have been most peculiar since early in June. It rarely happens that so much fog is present during that month: but what is still more peculiar is that it has continued down into July.

Today, July 13, the fog was exceptionally heavy in the early morning, with a sultry heat during midday that was torture, and this is only one day of most of them so far this month.

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A joke is going the rounds which involves one of our honey-buyers in a not altogether favorable light. Honey samples sent this particular buyer were believed to be graded far from the lines that their similarity in color would justify, and so to test the matter four samples were taken from the same 60-pound can and mailed to the buyer by four different beekeepers, and, strange to say, each was given a different grade, and a different price quoted.

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G. W. Bercaw, page 489, June 1, after reciting approved plans for handling bees, says, "When putting the excluders between the supers it is a very good plan to examine each comb below and cut out all drone comb that may show up." Well, Bro. Bercaw, in this day of foundation and wired frames the beekeeper is not supposed to be parading around his apiary with a big knife and basket to round up drone comb. Besides, if he is the right kind of beekeeper he would know long before spring time that there was drone comb in his frames and where to find it.

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Mr. Editor, you say, page 523, July 1, in your footnote to my paragraph on powder-paint, that "Cold-water paint is certainly better than no paint at all," then, further, "the hot sun checks the wood because the dark color of the weather-stained wood draws the heat." If color is all that is desired, why not use whitewash as a still cheaper article? I have a friend who uses whitewash on all his metal covers to reflect the heat, and claims it to be better than paint. Of course, that is on galvanized metal that needs little or no protection from the weather; but if it will reflect heat from metal it will also from wood—but paint for mine. I have hives in my apiary that have been in constant use for 28 years that are in perfect condition, and I will not trade even, with a gentleman whom I know

who has some hives 18 months old that have not been painted.

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## A CASE OF UNEVEN EXCHANGE.

A short time ago I found a colony headed by a laying worker; and as it was an unusually strong colony I decided to give it a queen at once. I removed two combs from the center of the brood-chamber and filled the vacancy with two combs of brood with adhering bees and queen from another colony. The two fertile worker combs with the adhering bees were placed in the colony where the queen had been removed. I was gratified to find the queen I had transferred to the laying-worker colony busily laying the following day. As I was engaged in raising some virgins I decided to give the queenless colony a stick of cells to care for and finish. In a few days I examined to see what progress they were making with my cells, when, to my astonishment, I found no cells at all. I made a thoro search to find the trouble, and, to my surprise and disgust, discovered that I had transferred the laying worker to the other colony, and the bees seemed to think I had done them a great favor in the transaction. Well, the joke is on me.

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## THE LIFE OF A BREEDER.

The purchasing of high-priced breeding queens to be transported a long distance thru the mails is very discouraging, to say the least, when mailed in the ordinary breeding queen-cages. It is my opinion that all breeding queens that are very valuable should be shipped only in nucleus hives accompanied by sufficient young bees to keep up their normal condition while in transit, old bees being eliminated as much as possible. This season I ordered queens for trial purposes, both the Goldens and ordinary Italians. For these I paid anywhere from \$3.50 for extra select tested to \$10 for guaranteed breeding queens, to say nothing of those that were sent me free of charge to enter the tryout. One of these queens was sent in a three-frame nucleus, and is in the best condition of any. One, after twelve days, had laid no eggs, and was returned to the sender. One disappeared after some two hundred queens had been raised from her. One, after ten days of open-hive life, has laid but a few eggs. One shows ordinary laying qualities, while the tendency of all much traveled queens seems to be to retire in favor of younger ones, shortly following their introduction.

# CONVERSATIONS WITH DOOLITTLE

At Borodino, New York.



## IMPROVING THE BEES.

"What is being done along the line of improving bees by selection in breeding? There is a whole lot of talk about it; but who is doing anything? All know that there is a great difference in colonies as regards results in honey storing; but what are we doing about it? Those who keep bees, with possibly a few exceptions, keep them for the profit they may yield; and it is quite safe to say that, when they cease to yield a profit for several years in succession, they would cease to have owners; and if they existed at all it would be in the wild."

I will give a bit of my history, and advance a few ideas which may be worth thinking about. I commenced beekeeping with black bees, and possibly might have given up the pursuit in disgust had not new hope dawned by the introduction of the Italian bee. When the seasons were propitious results were satisfactory. Two or three years of unfavorable conditions showed that these bees could not "stand grief." The wax-moth was very troublesome, and weak colonies would be greatly injured or put out of existence, the combs either being entirely consumed, or so much spoiled that when the bees came to fix them up they built drone comb. Thousands of drones resulted, which consumed much of the honey.

The black bees were much disposed to rob. Like some people they must do a big business or nothing. Then in a poor spring they were prone to desert their hive and swarm out, leaving brood, honey, and all the conditions one would think favorable to contentment, such as clean comb and clean hive. After flying like a natural swarm they would either alight or try to force an entrance into some other hive already occupied, and if they succeeded in gaining an entrance they were sure to be killed.

In 1873 I procured my first Italian queen, raised queens from her, and gave these young queens to about half of my colonies. The next spring I kept a careful watch of proceedings, and find this jotted down in an old diary of a year later: "I find the Italians proof against the wax-moth. They do not desert their hives in early spring; and whenever a small amount of honey is obtainable they will secure that and gain in stores, while the black bees require feeding." This settled the superiority of the Italian bees, and I soon had only Italians.

But when the black blood was all eliminated I found that the Italian bees were

not all alike profitable. Previously my thought had been that the queen that would lay the most eggs must certainly be the best. That idea proved to be a mistake. Some queens producing not nearly the number of eggs that others did would give much better results in surplus honey. A few years of experience will convince any that it is not the most prolific queens that will have the strongest colonies at the beginning of the clover flow, or give the most substantial results for the season. These facts being known, it remains for the beekeeper to state the reason why. If we cannot account for the fact of one colony collecting one-half more to twice as much as another in the same apiary, we can take the short cut and supersede the queens of the less productive ones with stock that gave twice as much. I have practiced this plan to quite a large extent during the past 35 years, and results show that it has not been in vain.

We have been told by the successful honey-producers that the introduction of new blood helps much by way of avoiding the evil effect of inbreeding. This can be brought about by bringing home colonies or queens from out-apiaries, by exchanging queens with other successful apiarists, or by an occasional purchase of a good queen.

But some one may ask, "How do you account for the difference in productiveness?" This is not always easy to tell. I incline toward the longevity and vitality of the workers of certain queens as being very desirable. When workers hatching from August 30 to September 10 were found doing a "land-office" business at gathering nectar from the clover bloom on June 25 to July 4 of the next year, I lost no time in rearing young queens from their mother, so that these young queens could replace all inferior stock in the apiary; and as the mother of this longevity stock showed a disposition to place the maximum number of bees on the stage of action at the blooming of clover, and when they entered the sections with their first nectar without a desire to swarm, I considered said queen of still more value. Such queens should be kept till they are two or more years old, rather than to have their lives "snuffed out" annually, as so strenuously advocated by many, that all colonies may be headed each spring with queens less than a year old. In this pruning-out of inferior stock, it is well to keep an eye out for vicious colonies. A vicious colony should not be tolerated any more than a vicious horse.



# CO-OPERATION IN SELLING HONEY

## THE UPS AND DOWNS OF THE CALIFORNIA ASSOCIATION

BY J. EDGAR ROSS

[There are a number of local co-operative honey associations in this country—The Colorado, The Imperial Valley (California), The Western New York, etc. We regret that we cannot give the full outline of the plan of the Colorado Honey-producers' Association, as this, we believe, is the oldest and most successful organization of the kind in the country. However, several illustrations of their store and warehouse were given in connection with Wesley Foster's article, Feb. 15th issue for last year, page 153. The histories of three of the other associations in this country are given herewith, together with the very interesting plan of our friends across the sea in New Zealand. Think of government inspection of honey!—ED.]

It was about nine years ago that a few of Imperial Valley's pioneer beekeepers got together and formed an organization that finally led to the incorporation, on June 9, 1908, of The Imperial Valley Beekeepers' Association.

The organization was born of necessity, as most co-operative organizations are; but in this case the necessity was unusually acute. Beekeeping in the mountain districts of California is a precarious occupation, and there are very few of the mountain beekeepers who ever attain affluence. About once in five years they harvest a bumper crop of very fine honey. But in most cases it requires all the proceeds, even when the price is a good one, to square up the old scores resulting from poor seasons. The beekeeper who can fight foul brood thru about four seasons, two of which may yield a moderate surplus, and feed thru two seasons of total failure, may bring thru a fair percentage of his colonies to gather the next bumper crop.

Imperial Valley recruited her pioneer beekeepers from the mountain sections of the state. Some drove in with a team of burros; others came in immigrant cars paid for with borrowed money. But not one drove in an automobile, nor even a Ford. The climatic conditions and honey-flow were so different in the low hot valley that different methods of management were necessary. That alone was sufficient to bring the beekeepers together for the purpose of comparing notes. But still more imperative was the necessity of finding a market for the crops of honey that came as regularly as the seasons, and getting cases in which to ship it.

There were no local honey-buyers, and no one who sold cases. Local freight rates to Los Angeles are prohibitive, so everything had to be handled in carload lots. This was too heavy a burden for any one of the early pioneers, so they were really forced to pool their interests.

The "gentlemen's agreement" plan under which they at first worked had some disad-

vantages. These they thought to eliminate by organizing a corporation and issuing capital stock at ten dollars a share. At first one of the members attended to the business of the corporation, which was of a very simple nature. When a carload of cases arrived each stockholder was notified to come and take from the car the number he had ordered. When a carload of honey was sold, each producer was notified to bring in his *pro rata* for shipment. But this plan also had its disadvantages; and as the beekeepers became more prosperous they felt able to afford better service.

The next step was to build a warehouse and employ a manager at a regular salary. To raise the additional capital needed, each stockholder bought enough additional shares of stock to represent an investment of twenty-five cents per colony for all of the bees he owned. A suitable building-site was leased from the railroad company, and a warehouse of ample capacity was erected where the freight cars could be shunted to one door and wagons driven up to the other.

To this warehouse the beekeepers could bring their honey at any time, set their price upon it, and, if they saw fit, take away a load of cases or other supplies which were charged to their account. When a carload was sold the proceeds were prorated among those who had offered their honey at the price secured; and after deducting twenty cents a case for handling the honey, and any charge that might be standing against each shipper, the checks were mailed to the individual stockholders. This plan relieved the producers of all the work and worry incident to the finding of a market, making up a carload, and shipping. There was no warehouse charge, no matter how long the honey was held. The charge of twenty cents a case on the honey sold, and a small profit made on cases and other supplies was ample to keep up the expense of the association and accumulate a small surplus. The arrangement was ideal, and the corporation was ready for the next step in its co-operative evolution.



Those who have studied American co-operation will know, without being told, the details—that the step following success is disagreement among the members and the formation of factions within the organization to strive for control of its affairs. The association had contributed very largely to the success of its members thru its credit, which was equal to the combined credit of all. But when some of its supporters got to the point where they were able to ship out their own honey in carload lots, and even ship in cases in the same manner, their co-operative ardor grew cold.

There arose a disagreement between the president and manager over a private business transaction in which the corporation had no part. The details are of no consequence. As a result of the trouble the president and his supporters withdrew their support from the association. The stockholders elected another president, and continued to prosper. Then came disquieting rumors that the ex-president was buying the stock of the disaffected ones for the purpose of securing control of the company. It was an ordinary stock company in which each share had a vote; and to guard against the danger of its passing into the control of one man hostile to co-operation, the stockholders met and voted to dissolve the corporation.

The stock had cost the shareholders ten dollars a share. The dissolution showed them to be worth sixteen dollars a share, and that was the sum returned to shareholders. Even the disaffected ex-president was satisfied with the settlement.

Steps were immediately taken to reorganize. In the new association no member was permitted to own more than one share of stock. To make up the necessary working capital each was required to loan the association, for five years without interest, a sum equal to twenty-five cents for every colony of bees in his possession at the time of organization. The association bought a lot where shipping facilities were nearly equal to the old location, and promptly erected a larger and better warehouse than the first one had been.

The affairs of the new association were conducted along almost the same lines as those of the old one had been, and it enjoyed one season of prosperity. Then came the old trouble, with new actors; new details cropped up, and the business of the association began to dwindle. It has been dwindling ever since. It has now almost reached the vanishing-point.

During its palmy days the association shipped 17 carloads of honey in a season,

when the entire output of the valley was about 25 carloads. Last year the output of the valley was 39 carloads, of which only three were handled by the association. It has neither working capital nor credit in the business world. The five-year notes to its stockholders are past due, and there is little prospect of their ever being paid. The association is virtually dead, and sooner or later the courts will preach its funeral sermon. When that time comes, the one thing that will save it from complete wreck is the fact that its real estate has trebled in value.

A few old wheel-horses of the organization are clinging to the wreck with more fidelity than business judgment. One of these not only gives his time without compensation to attend to the company business, but meets the overhead expenses from his private funds in the hope of a regeneration that will never come. There has been only one quorum of stockholders for more than a year, and that was secured by personally soliciting proxies.

The passing of the association should be regarded as a calamity to all the beekeepers of the valley, for its benefits have redounded to the non-member as well as the member. The first year I came to the valley I sold my honey at 6½ cents thru the association, while very little was sold outside of the association at more than 5½, and much of it brought only 5. During succeeding years there was less disparity in the price because that season taught the outsiders a lesson. The determination of its competitors to undersell it has made the price of bee supplies cheaper in Imperial Valley than anywhere else in the state. These are facts that even those opposed to the association are compelled to admit. Yet the organization has been permitted to die from lack of support.

Human nature is the same the world over, and every man wants to have his own way. Only the press of stern necessity will make him willing to yield it to another. Co-operation requires a yielding of the individual co-operators, and without the press of necessity it can never be a success. Beekeeping in Imperial Valley has been too profitable to make co-operation necessary. Individual prosperity was the rock upon which our co-operative ship stranded.

There are plenty of dealers in cases and other apiary supplies in Imperial Valley now. The producer is no longer forced to look for a carload buyer, tho many of them are able to sell in carload lots. Some of the Los Angeles distributors have a resident agent in the valley who will buy for cash any quantity of honey offered. Others send

a representative to the producer's door three or four times during the season. It costs us something to get along without the associa-

tion, but we can afford the cost in order to enjoy the luxury of having our own way. Brawley, Cal.

## THE WESTERN NEW YORK HONEY-PRODUCERS' ASSOCIATION

BY WM. F. VOLLMER

This association was formed because of conditions that were, we might say, detrimental to beekeepers. It was a case of every one paddling his own canoe. This is a condition under which beekeeping does not exactly prosper. The honey was sold at any fair price, as every one was ignorant of what his fellow-beekeepers were doing. Now, we have not gotten together and advised any price; but the idea in general is to get together and learn what the other fellow is getting and doing, and so some improvement on methods will always be found. In unison of ideas, facts will always spring forth.

It has been found that something can be saved by buying supplies in a co-operative way. In regard to marketing honey, every member sells all he can locally, as the slogan of this association has always been, "Supply your local home trade first." Those that have more honey than their local trade requires are usually taken care of by some of the other members who may be able to sell more than they produce. So in this way we also co-operate in marketing.

Proper grading is always required. Aside from this there are many other ways that we can help each other. We have two meetings a year where all general subjects are discussed, such as standardization, breeding, new ideas in labor-saving devices, etc. I have never failed to see some good accomplished.

### CO-OPERATION.

Taking the word "co-operate," which is, to work or act together or in unison, we are naturally confronted by many ideas; and to work together many conditional requirements are necessary. The more closely the efforts are placed together the more nearly perfect will be the achievement. Take, for example, the California Citrus Association (Sunkist); The Florida Citrus Exchange (Sealdsweet); The Alaska Pack-

ers' Association; The Chautauqua and Lake Erie Grape-growers, and many others, including also the Colorado Honey-producers' Association. In each of the industries we are forced to take notice of one thing in advance of all others: Each is located or built up in a locality as close as possible to the producers, which usually makes carload loading facilities more convenient to arrange than if the producers were scattered all over the country.

We will now look at some other lines in which co-operation is carried on, such as horticultural societies and co-operative creameries. These associations do not as a rule market in carload lots, as their markets are usually nearer and do not ordinarily absorb that amount—especially butter. Thus we will look to fruits and butter and see whether we cannot solve the honey question. Each grower or producer places his product in a package of uniform standard, on which is stamped the grade and variety of the product, and he is at liberty to sell where he pleases; or in case he cannot find a suitable market, some associations handle these products for their members, and usually have such warehouse facilities as are necessary to take care of the products in question properly. The essential thing in nearly all cases is to have a uniform grade as nearly as possible, and thus the selling proposition will be simplified considerably. Honey is, therefore, the hardest product to market because of its variety of flavors in different sections, and because the beekeepers have adopted so many different-sized packages.

Thus the different steps are, first, harmonization; second, organization; third, concentration, not only of the products but also of the minds of the persons involved and of their efforts. If these steps are all in harmony the inevitable result is action or co-operation.

Akron, N. Y.

## CO-OPERATION IN NEW ZEALAND

BY E. G. WARD

The question of a steady market for honey at a remunerative price has occupied the attention of the leading beekeepers of

the Dominion for a number of years. Till very recently it was much "go as you please," and, as a consequence, the honey-



producer was at the tender mercy of the buyer, who often played one man against another to keep prices down.

Seven or eight years ago the idea of a co-operative association to handle the output was mooted in Canterbury, but fell thru. Taranaki and Waikato beekeepers had also been trying to establish a co-operative association. The idea took shape in Taranaki about three years ago, and the New Zealand Honey-producers' Association, Limited, was established. Correspondence had passed between leading men in New Zealand; and after a conference held in Wellington two years ago the remaining districts agreed to fall in line with Taranaki, and include the whole Dominion instead of following the idea on Provincial lines.

The aim of the company is to include all honey-producers in New Zealand; and the articles of association have been framed with this object in view.

One of the chief attractions to the honey-producer is the fact that, instead of having to pay for shares in cash, payment is made by deduction of  $\frac{1}{8}$  of a penny per pound from the value of the honey sent in. It is compulsory for all suppliers to take one share for each four hundredweight of honey supplied, and power is given to the directors to allot shares on this basis, with or without the consent of the shareholder.

It is also provided that no shareholder shall compete with the company by supplying to the trade. If this is done, the directors have power to forfeit the shares held by the offender.

Shares may be taken up on a cash basis also, but this has not been done to any great extent so far.

A contract is in existence for the supply of a minimum of 100 tons and maximum of 500 tons per annum for a term of three years to a British firm. One year has expired. Provision is made to continue indefinitely if mutually agreeable. All honey exported is graded by a government expert, and paid for according to grade; but by

the selection of a suitable market and judicious blending the lower grades can be handled to the producer's advantage.

Honey for the local market is standardized, and, when necessary, blending is resorted to to bring the honey up or down to the standard.

As beekeepers in all parts of the Dominion are becoming shareholders, provision has been made to insure adequate and just representation on the directorate. The Dominion has been divided into seven honey districts, and the shareholders in each district have power to elect a director to represent them.

Up till now the distribution has been effected thru the ordinary channels—the merchant purchasing from the company, the retailer from the merchant. The most popular package is the two-pound tin, which is packed four dozen in a case.

The honey is received at the depots in 60-pound tins, chiefly in liquid form. Payment is made on the 20th of the month following delivery.

Unfortunately for the company the past three seasons have been very poor, so that the support given has not quite come up to expectations. However, one encouraging feature is that, wherever the company's honey has been introduced, a market is secured. The standard of excellence is high, and merchants prefer to deal with the company rather than individuals, on account of being assured of a continuity of supplies. The honey is sold under a registered brand—H P A.

Recent reports from the English distributing agent are decidedly encouraging. The company's honey may be obtained from about 3000 shops in the United Kingdom, including all the large stores in London, under the registered brand—N Z H P A. Window displays have been made, and a vigorous advertising campaign started, and, as a consequence, it is certain that all it is possible to export will find a ready sale.

Christ Church, N. Z.

## A NATIONAL CO-OPERATIVE SOCIETY URGED

BY J. F. ARCHDEKIN

There is very evidently in progress the beginning of a great movement among the beekeepers of America. This movement is in the direction of better markets and better marketing facilities for honey. Every one is thinking about this subject, which is of vital interest. The exact form which this movement will assume is indeed problematical; but the goal to be attained is plain to

all. It is not my purpose to suggest any definite plan in this discussion, but merely to outline a few ideas presented by my correspondents, together with some of my own. Below is a letter that is typical of a number I have received.

Dear Sir:—I am a commercial traveler, and have kept bees as a hobby all my life, and enjoy a few hours among them each



week. The problem of marketing any product is a large one, and especially in marketing honey. In one community we find large supplies practically unsalable, and a few hundred miles away we find a keen demand. Could not the beekeepers put on an advertising campaign and sell their own honey? It could be carried into buying supplies, and every beekeeper would gain. Personally I should be glad to spend a great deal of my spare time in preaching the cause, and would not accept a cent. If each member paid \$10 a year a great deal of advertising could be done. I always feel that we are all one family, and all are working for the good of all. It is with just that feeling that I am writing you. C. D. McLean.

Windsor, Ont., Feb. 14.

I heartily agree with our brother. Co-operation has always been a distinguishing feature of the human race. It is true in every department of life. Look at the giant trusts and monopolies that have sprung up in recent years. They are composed of many single units. Why not let the beekeepers organize? If they do organize, will they stick?

If there is a set of rules to be followed by the members, how are they to be kept in line with the rules? How is the new organ-

ization to avoid the fate of the National in regard to the selling of honey? These and many other questions are going to be burning ones when the new organization appears. It will be national in its scope, and it is going to be a difficult matter to harmonize all the different sections of the country so as to benefit all.

Mr. O. S. Mullin, President of the Kansas State Beekeepers' Association, writes me, urging an organization of the beekeepers. I agree with him that the National Beekeepers' Association had a great opportunity before it at one time, but failed to grasp it.

The *Booster* is trying to accomplish the desired object, and I sincerely hope it will; but, like all other projects, it has weak points that will have to be overcome. I do not wish to be understood as criticising; but how many state vice-presidents do you suppose would attend a meeting at Chicago, or anywhere else for that matter? There is work ahead for the *Booster*, and trials and troubles; but I am for it all the time.

Bordlonville, Ia.

[See the following article by Wesley Foster.—Ed.]

## THE NEW NATIONAL HONEY-PRODUCERS' ASSOCIATION

BY WESLEY FOSTER

The successful marketing of the honey crop of the United States is not dependent upon co-operative marketing associations, except in a few districts. Co-operative marketing, however, has been an important influence in the moving of the honey crop, and is bound to become more so. The honey-producer who has a near-by market and few honey-producing competitors needs little help from co-operative associations.

We have too few honey-distributing agencies that know the honey proposition. Individual beekeepers do not have the means, time, nor ability to build a honey-distributing business such as will aid the honey-producers in a substantial way.

The honey-producers of the West do not require a high-priced market, but they want, and should have, a stable market at a fair price. They want a marketing agency that will take their honey and advance to them a part of the value of the crop and get the remainder to them in a few weeks, or at most a few months.

The National Honey-producers' Association is an organization capitalized at \$50,000, and closely follows the organization features of The Colorado Honey-producers' Association and the Idaho Honey-produc-

ers' Association. It is made up of specialist beekeepers who, however, do not depend upon the Association to market all their honey. It is so far something in the form of a safety valve to help out in marketing when marketing is difficult. So far, the honey of non-members has been more largely handled than that of members for the reason that the members, doubtless, have better means of disposing of honey than many non-members.

The National Honey-producers' Association has its headquarters in Kansas City, Missouri, where a honey-store is maintained with a manager in charge. A salesman has been kept on the road as is found profitable. Sales direct to the retailers have been featured, while the jobbing of large lots is done when stocks are heavy and an opportunity offers. Honey has been handled in carlots from California, Arizona, Nevada, Idaho, and Colorado. It is not desired that the membership be large, for there is danger of having more honey produced by our membership than can be successfully handled.

The main features where we claim success has attended our efforts are that we are building substantially a honey trade among the thousands of retail grocers in the Kan-

sas City territory. Our trademark brands of honey are handled by over eight hundred grocers in Kansas City alone.

We are blending the white, mild-flavored honey with the darker, stronger-flavored grades from the territory we serve, and have learned to put out a product that surpasses in color (a beautiful golden light amber) the water-white, and in flavor gives more general satisfaction than the mild flavors or the pronounced grades. We put out a grade that can be put out in quantities the year round, and we have it always on hand.

Concerning the handling of comb honey, our members vary somewhat in grading methods; and while standardization is advocated, our market is so wide that various kinds of honey can be placed fairly well. If a member's grading is faulty, he hears from the manager and also suffers in the price secured, just as he should expect to. We do not expect to have to curry favor with the beekeepers, neither will they have to scrape to the association. If they are honorable and fair in their dealings, the business will be satisfactory all around. Beekeepers who can do business on business principles are welcome, and the other kind are not wanted. In fact, the best way for prospective members to do is to deal with the association some and find out whether they want to come in.

The prices secured for members have not been much higher than the market, but it has helped numerous beemen to dispose of crops that could find no market. It is simply a commission business owned by the beekeepers. Whether it succeeds greatly is not important; it has succeeded nominally. The beekeepers are learning to trust each other, work together, and put out a product more suited to the market. No single member of the association can put up a product so uniform thruout the year.

Our finances are still low, and we will have to wait and build slowly. This is as much an advantage as a disadvantage. Some funds have been advanced by the directors to pay part on members' honey. The beekeepers have been very patient in waiting for their money, and this helps in starting any co-operative enterprise.

Concerning the future of co-operation, the writer believes that it will not be many years until there will be a federation of co-operative honey-marketing associations for securing various desired objects, the development of more markets, the better distribution of the honey crop preventing a glut in any one place. This federation will doubtless be rather loose in form at first:

that is, it will not affect the local association's management to any extent. In time, the federation may be so centralized that it will dictate that all of a member's product shall be marketed thru his association, and thus thru the federation. This may never come, for the reason that beekeepers will not find it expedient or feasible to curtail the individual work of beekeepers developing their local markets. No association should hamper the beekeeper's activities along this line.

The various local associations organized into a federation would doubtless put out four or perhaps six brands of extracted honey to cater to the tastes of the various sections of the country, and use up the total surplus extracted-honey crop. There should be trademarked "baking honey," a trademarked "fruit-canning honey," and several brands of table honey.

The comb honey could be cartoned and trademarked to suit the market and the product. This trademarking is now done by our association and several others. If they all got together in a federation, it can be easily seen that something of the same, along advanced lines, would be taken up.

A conference of the various honey-marketing associations would be conducive of good results, and there will doubtless be such a conference before many years pass. Our association will gladly co-operate with others in the work.

#### THE NATIONAL HONEY-PRODUCERS' ASSOCIATION.

The president of the National Honey-producers' Association is Mr. D. C. Polhemus, of Lamar, Colorado. Mr. Polhemus owned and operated the honey business in Kansas City taken over by the association. He is a man of large experience in producing and marketing honey. His apiaries comprise more than two thousand colonies, and his honey sales are much greater than his own production. He is a man of standing in his community and enjoys the confidence of all who have done business with him.

Mr. G. P. Stark is the manager in charge of the Kansas City store. He has had large experience in the honey business in Kansas City, and is thoro, business-like, and straightforward in all his work, and is enthusiastic, and is building the business very substantially. Mr. Stark is one of the members of the association, and will be glad to have beekeepers visiting Kansas City call at the store, 928 Garfield Avenue, Kansas City, Missouri.

Boulder, Col.



## HOW TO MEET COMPETITION

BY JAMES A. BROWN

Consternation reigned in Beedom. The ærial scouts had brought in startling reports of strange and mysterious operations among men. They had sat beside office windows and heard high officials talk of a new and marvelous product which should take the place of honey. They had heard the whirl of a thousand wheels where this new product was being manufactured. Finally, they had seen it advertised in great flaring letters, this mysterious substitute for honey.

All this could mean nothing but ruin to the business of the bees, they reported. The report spread until it had become a fact. "Our business is ruined—ruined!" they wailed.

Work ceased. Everywhere there was frenzied discussion. The workers proposed to organize a labor union and defend their rights to the bitter end. The queens became so perplexed that they forgot to lay any eggs. The drones moved a little more rapidly than usual, gorged themselves a little more than usual, and sagely offered a little more advice than usual.

The militarists, who were first to be heard, because loudest in their cries, were for immediate declaration of war, and for continuous bombardment of their competitors until they surrendered.

The ultra-pacifists, on the other hand (having fought for an opportunity to speak), proposed the appointment of a committee which should visit the manufacturers and solemnly protest, in the name of justice and on the ground of long precedence in the business, and further kindly suggest and earnestly solicit the immediate abandonment of the offending project.

At this point, fearing dire consequences should the advocates of these widely diver-

gent views continue their discussion longer, the laziest and "wisest" old drone arose to propose a solution out of the fund of his "wide observation and experience."

The crisis was not really serious in his estimation. Undue alarm was being manifested. All that was necessary to save their business without sacrificing either peace or honor was to stop making honey and make this new product themselves. This was perfectly self-evident and logical. Nothing could be more simple or more sensible—to a drone, who had never done a day's work nor made a drop of honey in his life.

At this moment, however, two more scouts returned, weary to the point of exhaustion, but evidently bearing most important tidings. Not satisfied with what the others had seen, they had carried their investigations to the stores and finally to the consumers. In the store windows they saw large displays of the goods. Some went inside to buy, and the scouts followed these to their homes. Singularly enough, in every home they heard what might almost have been a stereotyped conversation:

"Pretty good, isn't it?"

"Yes, but it doesn't taste like honey."

"That's right; it doesn't. When I want honey I want the best the bees can make."

The bees' convention waited to hear no more. It rose *en masse* and rushed forth with a mighty roar of satisfaction. Very soon, wigwagging signals of joy to one another, each was in its accustomed place, working harder than ever. The life of Beedom was once more tranquil, and filled with deep contentment.

The bees had learned that the best way to meet competition is to do the thing you can do best, the best you can do it.

Warren, Ohio.

## JUST HOW ASSOCIATIONS CAN HELP

BY R. DIEMER

With much interest I have read the articles in GLEANINGS and other bee-papers about marketing honey. Most beekeepers cry for higher prices, but do very little on their part to get them by advertising and developing their home market. Everybody seems to think the other fellow will do it also. The market for honey will not become better before every honey-producer, small or big, does his share in advertising and enlightening the public as to the value of honey. The first thing every beekeeper

should do is to give the public information about the value of honey as a food compared with other products; he must strive to keep his customer supplied the year round, not only just about six or eight weeks after the harvest.

Our main competitor is the cheap syrup, and we can combat that competitor only by showing the superior food value of honey, and bringing on the market a really superior product, all the year round, and at as low a price as the best grades of syrup.

We beekeepers must, therefore, try to produce as cheaply as possible. This is a point very much overlooked, and most beekeepers don't like to hear it. Everybody is crying for a living price, and thinks the other fellow should pay him an easy living, but he will do nothing himself. Work hard and try to produce cheaper, so you can sell cheaper and still make a good profit. What did you do last winter to be better posted on your business this season? Do you know all the tricks of the trade? If you catch only one new idea in a bee-book, is it paid for ten times over?

Having produced cheaply we must try to bring our product cheaply on the market. I think it is wrong to put up our honey in the finest flint-glass jars so that the container costs just as much as the contents. Very few housewives care for more jars when they don't need them. The canning time is gone when the honey comes on the market. It would be better if the container were so cheap that little would have to be added to the selling price of the honey. We must avoid as much as possible the small packages—the smaller the package the greater the comparative cost.

The attractiveness of honey in flint-glass jars is lost in cheap tin cans; but we must make this up by very nice labels. In none of the catalogs could I find a label that I wanted. I looked for an attractive label which at the same time would advertise and show the superiority of honey over artificial products.

The label printers should bring out new ideas, and not use the same cuts indefinitely. If a new label costs a little more, I am willing to pay it, and I think most beekeepers would do the same if they could get what they want.

In supplying our customer the year round with honey he will not think of buying syrup if he is once accustomed to honey. If the honey supply is cut off we force him to do this very thing. After

using syrups regularly ten months in the year, very few are willing to buy honey the other two months. They regard honey as an extra luxury to give to the children in teaspoon doses as a cough remedy rather than as a food. The market problem for honey is for the most part a distributing problem which could be better solved if we would try to distribute our product over the whole year. The trouble is that nearly every beekeeper is eager to dump his honey on the market as soon as harvested, to get rid of any further trouble.

#### WHERE AN ASSOCIATION CAN HELP.

Most of the smaller beekeepers, and many of the bigger ones too, will wonder how they can keep some of the honey over to the next season in order to sell it the year round. The honey will candy, and they have neither time nor proper equipment to liquefy it. All this trouble would disappear if there were a well-founded and well-managed association which could take over every pound of honey and grade and blend it so that there will be a uniform article the whole year round, so that every buyer knows exactly what he gets when he asks for California first-class light-amber honey or Michigan first-class water-white white-clover honey, etc. Hitherto there has not been the right spirit in an association. Every beekeeper should be a member, even if he has only two colonies of bees. Now, the big fellows overlook the small ones, and the small ones spoil the market in selling off grades of honey (sometimes big fellows do the same). We must try to get those little fellows, and teach them. The wise guy who knows everything you can't teach.

Local associations must federate into state associations, and they in turn must be federated into the national association. The national association can't manage local affairs, and the local association can't do national work.

Chico, Cal.

## DROPPING FRUIT AND POULTRY TO TAKE CARE OF HONEY TRADE

BY INEZ A. BEALS

A hustler in the honey business, and a man whom some beemen and honey-dealers know, and others should know, is Mr. Herbert B. Phillips, of Auburn, Me. Mr. Phillips keeps but a few colonies now, altho he is increasing his number. He devotes his time almost wholly to the bottling of honey for his trade at home as well as elsewhere. His business is mostly with extracted honey, altho he handles a good deal of comb honey

and some beeswax. There is nearly always a call for good comb honey.

Mr. Phillips' home is situated about two miles from the business section of the city, and it is there that he keeps his bees and his storehouses.

His liquefying is done by steam. At the time we visited him he had about seven tons of honey on hand, and four or five more *en route*. His packages are very attractive,



the honey being put up in 15, 8, and  $5\frac{1}{2}$  oz. bottles. He also carries three and six pound cans which all bear his brand, "Hillcrest."

The individual-size bottle is used extensively in hotels near by, and the demand is increasing more and more, so dainty are they. Many summer visitors coming into Maine every year become acquainted with this brand of goods, and send to Mr. Phillips from their homes for the honey. Thus by parcel post his trade reaches to New York, New Jersey, Boston, and vicinity.

Mrs. Phillips is her husband's partner in the business. She thoroly understands it, and often demonstrates their goods in stores at home and in other cities, where their honey has become known. Their daughter is also a helper in vacation seasons.

An auto truck was added to the business last summer, which enables them to do more business in a much shorter time than before, and also to make trips to surrounding towns and fairs, advertising and selling their honey. This proves the value of the auto to the business man.

Poor grading in comb honey has been very bothersome to him at times. He once received a shipment from a producer where the sections in a case varied five to seven ounces. To one who deals honestly with all, such instances are discouraging and annoying. Care should be taken in grading all honey.

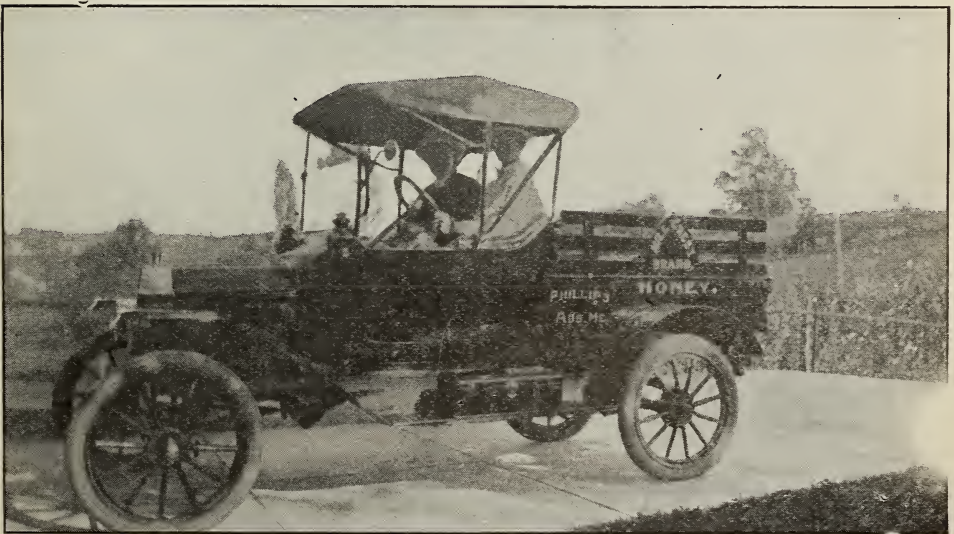
At the Phillips home (Hillcrest Farm) delicious small fruits are to be found—enough to make that a business alone, and



Herbert B. Phillips is an up-to-date beekeeper and honey salesman who was forced to drop his fruit and poultry side lines to care for his honey business.

I think such was the case at one time as well as the poultry business; but the growth of the honey trade, and the scarcity of dependable help, make it impossible for Mr. Phillips to continue this part of his business.

Lewiston, Me.



Mr. Phillips reaches his customers in a truly up-to-date way.

## BEES HELP SALESMEN

BY J. FRANK FOOSHE,

*Market Agent, Roanoke Chamber of Commerce.*

[Mr. Fooshe is a son of the well-known queen-breeder, J. D. Fooshe. Because of his former experience with bees he is eminently well prepared to use bees in his demonstration work.—Ed.]

In my work here as market agent of the Roanoke Chamber of Commerce I am using bees for a practical demonstration of the principles of marketing. For this purpose I have screened in a large transfer wagon so that no bees can get out. In this wagon I have a hive of typical three-banded Italian bees. When I get in the wagon on the crowded market square the people swarm around. I handle the bees without gloves, veil, or hat. I make it a point to explain to the on-lookers that there is no magic in my being able to handle the bees in this way, as I go in to do nothing that will disturb them, and to let nothing they do to me rattle me.

I have a twofold object in giving this demonstration in the handling of bees. First, I want to impress upon the large number of fruit-growers and truckers who come to this market each week the importance of handling their fruits and vegetables with the same care that is necessary in the handling of bees. Second, I try to emphasize the great possibilities of this mountain section for producing honey of the very best grade.

The slogan in my work is, "Reducing waste thru better grading, packing, and handling, the only way to bridge the chasm between *more* to the producer at *less* to the consumer." I am using every effort to impress this one truth of cutting out waste, however it may occur. I go right to the farmer's wagon and help him grade, pack, and sell the load he has brought in today, in the hope that he will bring his load tomorrow in better shape. As to whether he will or not, the large number of growers who were using the standard packages for tomatoes and peaches at the close of a month's work here last summer as compared with at the beginning is the best evidence. The principles of farm demonstration are just as applicable to selling as to producing. If the farm is a good place to help the farmer with his growing problems, certainly the market square offers a fine opportunity for helping his with his selling.

As to why I should select a colony of bees for trying to impress better grading and handling, it is easy to answer. The bee and its products represent the highest degree of perfection in marketing anything from the farm that I know of. If bees and queens

are to be put in the cage, each one must be handled with care. If honey is to be carried to the local market, or shipped to some distant point, a very high degree of care is necessary. The perfection with which bees do their part calls for the best methods in handling them at every move.

It is a matter of peculiar gratification to me to be able to use these bees for this marketing demonstration for the purpose of causing the people to think of and to put into practice better methods in the handling of their produce. It is to the bee that I owe my college education, for the bee money at our home in South Carolina was the educational fund, set aside for this specific purpose. While I had not been in a hive of bees for several years till last week, I was delighted to have this experience again. It added greatly to my pleasure to have Mr. C. E. Layman, of Troutville, who furnished me with the bees and all supplies for this demonstration, tell me that several years ago he had secured from my father the foundation of his present breeding stock. I have never taken much stock in bees having knowledge of people; but if there is such a thing, these bees seem to have met an old friend of their parents, for I never worked with any more kindly disposed bees at any time.

Another most gratifying matter to me is the number of people who are wanting information about bees. Some want to transfer from the old-fashioned box hives to those with movable frames; others want to Italianize their bees, and still many others want to get started in keeping bees. The number of business inquiries from the first day's demonstration is a striking instance of the principle for which I stand in my marketing demonstrations. Instead of government experts and college professors running all over the country to speak to a handful of men here today and several hundred miles away tomorrow, some advantage should be taken of the large number of farmers gathered about the market square to preach the gospel of better farming, including both producing and selling. I am an ardent believer in the church as the staying factor in our social and business life; but I am just as enthusiastic over the work of the Salvation Army as a powerful agency in the advancement of his kingdom.



Salvation Army methods are needed for reaching farmers who have not been reached in any other way.

As a further illustration of how the men on the market square may be used for helping to carry forward the gospel of improved methods in the handling of produce, I am sending out this week five thousand government bulletins on the care of butter and eggs. These are being sent thru the large number of country peddlers who come to

this market each week from the far-back mountain country, most of them coming 30 to 75 miles. Two bulletins are being put in each package to be delivered at the homes from which these peddlers buy their produce. They have entered enthusiastically into the plans of this organization for securing better marketing conditions. They are our missionaries for helping to build up the surrounding country.

Roanoke, Va.

## ARE YOU A SALESMAN?

### Some Conditions of Honey-selling and Some Suggestions

BY ARTHUR C. MILLER

So you have a fine crop of honey to sell. Well, what is it and what are you asking for it? You say it is a bright light amber, of good flavor, and should be worth 9 cents; that Jones & Company offered 7½ cts., but you are going to hold for more.

In that paragraph is summed up about all that the majority of producers know about the selling of their crop. Some of the things which they don't know are just where their crop really does grade as to color, flavor, and body; the amount of similar honey within, say, five hundred miles; the general crop of honey the country over; the amount of honey the local market will consume; the amount likely to be offered in that market; the best distant market to ship to, and the level of prices as compared with previous years. Every one of those items is complex, and the knowledge necessary to form an intelligent answer to any one is not to be acquired off hand. Relatively few producers know where to look for the desired information, or, after securing it, know how to use it to advantage.

But even if accurate knowledge is possessed of size of crop and of level of price, the quality of one's own crop may not be known. And on that quality will depend its ready or slow sale, as the case may be. I may think my honey is "fine;" but if it possesses some peculiar flavor, is a little light in body, a trifle "off" in color, quick to crystallize, or, for want of thoro curing, lacks good body, it will not bring the price I expect. Under such circumstances I shall probably find fault with the buyer, overproduction, etc. If, on the other hand, I have educated myself as to honey flavors, colors, and bodies from many places, and have learned what types the different markets demand, then I can intelligently judge of my own crop, and of its quality and value. If you have not that knowledge,

just send samples of your crop to half a dozen of the handlers who are well posted, and ask them to give you its "grade." The "grade" you must know before you seek a market.

Knowing the grade, where will you sell? Bless me, how should I know? To be sure, I am writing this to try to tell you something about marketing; but, not knowing your selling talent, I can only tell you to study *yourself*. If you are a good salesman you can create a market where the other fellow says there is none. To illustrate: The producers round about a New York state city said the market was glutted, and that they could not move their honey at any price. Another producer from a hundred odd miles away dropped into town for a convention, and before sessions "kind of sauntered around town" as he put it, and took orders for a lot of honey to be shipped in from his place. He was a *salesman*. If you are not, then you can well afford to pay a very liberal commission to such a man to market your crop for you. Find out what you are.

Know your market. If you are a really sure-enough salesman, you will learn it before you have called on many people. If not, you must keep at it until you find out what sort of packages and kind of honey the market wants. This for selling to retailers. If selling to jobbers, *they* will determine whether they can use your honey, and they will bid as low as they dare. Then if you know the amount of crop and price level, you can jockey with them. If you don't know those things you take their price or keep your crop save in the rare years when the supply is far below the demand. And if the agricultural schools keep turning out a fresh bunch of beekeepers every year, those rare years will soon become as rare as hens' teeth. And it depends on the point

of view whether that will or will not be an evil.

Now, here is a secret. I don't tell it to any except a favored few, because I don't want to get the masses to plunging into the honey business. Among ourselves we all know what a bonanza honey-producing is; how a swarm of bees put in a \$4.50 hive will give 400 pounds of honey, which, if we retail it ourselves in any of the big cities, will bring us \$100, and that all we have got to do is to keep all the bees we can care for. When we allow for a poor season now and then, and for a lower price now and then just to crush some presumptuous competitor, you know, we can surely average \$75.00 each; and if we are smart, and hustle, we can take care of a thousand colonies without help—that of the wife and children doesn't count—so that the only problem which really confronts us is that of marketing. Now keeping this secret to yourself, and bearing in mind the great possibilities, you will more fully appreciate the vital importance of the selling, and to which I will now return.

Having found out what your crop is in quality, go out into the wilderness—of the city—and study the ways of the wild creatures. See what sort of packages are in use. There may be none; and then, oh rapture! there is a virgin field before you. But study packages, labels, etc., then get some for yourself.

I would tell you to get a nice jar and a neat label; but before I do, I will ask you what constitutes a nice jar and a neat label? Judging by much that I've seen in the various markets, I think very few honey-sellers have a clear idea of what is "nice" or "neat." Most labels are an agonizing jumble of type and color, very interesting curiosities of the lithographer's art, but no help at all in selling the honey. I don't care a rap what the label says, provided it only induces the observer to buy the package and test its contents. After that—if it is my honey—he will come back for more of the good things behind that label, and it is just there that I want my label to have an individuality which is exactly what the made-by-the-mile lithographed does *not* possess.

What have I to say about packages? What is your market? The average city market wants a glass package, smooth clean jar, smooth non-leakable top, and in sundry sizes. One store will use nothing but pounds; another a smaller, and another a larger size, and still another a mixture of two or more sizes. You never can tell till you try them out. Size of package is governed by the customary purchasing price

of the community. In one town, pounds retail for 15 cents; in another, for 30 cents. One store sells only for even nickels, while the next sells wholly on odd cents, as nine, fourteen, eighteen, etc.; and they measure your price by what the packages retail for.

One town will take dark-amber honey and give the top price for it; another wants light amber, while the next wants water-white. One wants mild, almost insipid honey, while the next wants something pretty rank.

Oh, this selling to the retailer is such a simple art! And even that simplicity is simplified when these sundry preferences exist between stores of the same town, and each store wants a different brand; and the salesman becomes insanely happy when on top of all this the buyers want all candying honey exchanged and all broken combs replaced. Oh, joy!

Possibly one of the best ways to learn the art of suiting the retailers is to go to work for a few score of them, perhaps buy for some of them at a profit-producing price. And that reminds me—do you know how much "profit" has to be added to your goods before the consumer gets them? Here are some of the costs between producer and consumer, supposing the producer sells his crop in bulk. Freight, cartage, and jobbers' expenses, minimum fifteen per cent; packages and packing, about ten per cent; "cash store" retail expenses, fifteen to twenty per cent; while a credit store's "overhead" may run to thirty-five or fifty per cent. Suppose your honey goes to the consumer in a pound jar selling for twenty-five cents; deduct from that, say fifty per cent just for expenses, then deduct what you think are the profits of these middlemen, and see how much is left for you. Can you afford to produce honey at that price? It depends on how much you produce at how much per pound. Do you know? Have you even a remote idea? Better find out before you get into the honey business very deeply. When you find out the cost of production, go into the cost of your marketing. You may find that the "overhead" expenses are up there like Damocles' sword ready to cut off all your profits on the slightest incautious move. Knowledge is said to be power; but it is also at times mightily disconcerting to our plans and pipe dreams. However, it is just as well to acquire a goodly bit of it at the start. The good wife and kiddies are less likely to be hungry and disappointed by and by.

After you have learned all about what your local market wants, you will find it is so for only a little while; that it is constantly changing, and that, unless you are



awake and alert, some chap who is will crowd you out. The scramble for a living is just about as cold, heartless, and unfeeling in trade as it is among the animals. Sentiment, good fellowship, good will, kindly feelings, may be expressed, but orders are what the salesmen are after, and the chap who gets them is the one who counts.

When the competition gets keen, and prices drop and drop, what are you going to do? Hang on, drop prices and sell, or give up the business altogether? It depends on what you know of your business. If you are not thoroly informed, you are not in position to fight successfully for your living, and sooner or later you will go under. We have had all sorts of producing schemes and all sorts of appliances, and we have discussed these things until our voices are husky and our ink used up, but precious little have we heard of the cost of using said appliances or methods. We shall have to know pretty soon, for this honey business is getting down to brass tacks.

As consumption increases, prices will drop. Why? Oh! well, that is one of the economic laws which we have so far been unable to repeal. To explain it a bit—a lawyer would charge you for the explanation, but I won't, because I am already overburdened with the profits from the bees, and want you to be. To continue, when the demand for things increases, the production increases; more people enter the business, and very soon down go prices. Some fine day the dear public's fancy changes, demand falls off, and—well, only the strong and the astute weather the storm. And when you are put up against such conditions you will either holler for help or sit

down to live on the interest of your wealth. The strong and astute are those who have prepared themselves to meet the storms of competition, low prices, changing demands, etc., by piling up a reserve of capital, by learning all the arts of selling, by anticipating the consumers' demands—in a word, by being "forehanded." That term was given by our good old New England ancestors to the successful, thrifty, hardheaded ones among them. The homely virtue is as good today as then. Forehanded means more than the acquisition of worldly goods. It means the knowledge and thoughtfulness on which such thrift is based. I repeat, to get the knowledge of markets, of the kind of honey wanted, of the best packages, etc., go into the market, *buy* honey, taste it, study the packing, ask questions, follow the conventions, ask more questions, stop, look and listen, then move on and do it some more.

"They have eyes but they see not, and ears have they but they hear not." If you are both deaf and blind to what is about you, for your own sake and for the sake of the rest of us *hire a salesman*. Do you say that you cannot afford to? Then pool your issues with your fellow-craftsmen; go into a marketing association as some of the Colorado beemen have done, and as so many fruit and other specialists have done. To be sure, you will have to yield to the majority; but most of the time the majority is pretty nearly right. Co-operation is a sadly overworked word, but a very much underused fact. Be as willing to yield to others as to express your own views; *get together* and *pull together*. Perhaps you are doing very well going it alone; but in the long run you may do a lot better "running with the pack."

Providence, R. I.

## THE NECESSITY FOR ADEQUATE GRADING

BY JOHN W. LOVE

The attitude expressed in the bromide, "We are beekeepers, not salesmen," is all very well for the man who keeps bees as a backyard hobby; but the honey-producer who depends on his colonies for a living cannot afford to neglect the principles of marketing farm produce. Some very important developments have taken place in this new science of selling, and more important advances are due in the near future.

The preparation of a package has long been recognized as a basis of success in business of any kind. It would be impossible for manufacturers to deal with distributors without having between them a clear

understanding on sizes, grades, and packages. Yet farmers have been slow to grasp the significance of this principle. They have continued to send to market apples of different sizes in baskets of varying capacity, strawberries in crates of odd dimensions, and comb honey of widely different grades in the same lot.

If the dealer is to quote a price he must know exactly what he is getting; and before transactions can be placed on a permanent basis of confidence he must know that what he receives will be strictly true to grade. It is impossible to make much progress until the buyer and seller discuss the com-

modity on the same terms. Standardization of packages and contents is also necessary before marketing information can be disseminated.

In this direction a beginning has been made in the adoption of grading rules, such as those of the National Beekeepers' Association; but outside of the successful co-operative associations very few honey-producers give adequate attention to this important matter. The situation has been the same in apiculture as in fruit or cotton growing—the producer has relied upon the buyers to make the classification by competitive bidding. It does not work out this way, however, as investigations by the Bureau of Markets have shown.

It is true that a product of high grade will sell itself, albeit with some loss if the sizes of packages are not uniform. The trouble lies with low grades, culls, and mixtures. These are ruinous to the whole market, whether they are cotton bales, grapes, or sections of honey.

The public is ready to pay good prices for the product which is uniform in quality, size, and package. Consumers are quick to appreciate a commodity of uniform high grade, and are willing to pay prices which will be remunerative to the producer. This has been demonstrated in the success with which standardized syrups, cereals, and canned vegetables have sold at prices three times those paid to the producer.

#### NEW HONEY STANDARDS COMING.

Since the net-weight law went into effect loud protests have gone up from beekeepers who object to the trouble it makes in stamping the weight on the sections. The new law makes for standardization, however, and so must be considered a step in advance. The only drawback is that standardization has not yet gone far enough. It does not yet include sizes of sections and grades of honey.

Perhaps further advances in this direction are premature, at least until some of the agitation against the present law quiets down; but more detailed standardization on the part of the Government is coming, and the sooner it comes the better for the retail honey market.

What will be the nature of the new legislation? Congress has established the standard apple-barrel which now has the same legal status as the bushel. At present, standardization of apple-boxes, berry-crates, and cups is under consideration. It is not unlikely that the Government will undertake to define sections for comb honey in the same law. Ample time will be given, of course, for the beekeepers to use up sections of odd size. The form or forms standardized would be those in most common use.

This standard would be enforced in the same way as the standard apple-barrel. Bees would still have the right to build comb in any other thing; but the producer could not sell the product at a price per section unless its dimensions conformed to the government rule. Congress has the right to enact such legislation under the weights and measures provision of the Constitution. It would be applied without regard to whether the business is interstate or not.

The Government can never be expected to accomplish as much for honey-producers in this direction as they can do for themselves thru co-operative effort. Such standardization as contemplated would not be as effective as the Colorado Honey-producers' Association enforces among its members, for example. But it would be something, at least, and would probably make possible more extended co-operative organization in the craft. This would mean larger profits for the individual producer.

Cleveland, O.

## SELL DIRECT OR TO THE RETAILER

BY CHARLES H. CHESLEY

The small honey-producer can often dispose of his product thru the agency of some local grocer; or in case he has too much for one merchant to handle, two or more can be induced to handle the output. There is usually more money for the producer by selling to the retailer direct than in dealing with a commission house. Of course, when the output is fairly extensive it may be necessary to do business with the commission man.

The honey market is one that can be

developed in many communities. Thus one producer in a community where beekeeping is rather uncommon had a small circular printed, describing the uses and valuable qualities of honey. This was left on the counter of one of the main groceries. On the bottom of the circular was announced the fact that "our product is for sale by John Smith & Son." It was stated that this more than doubled the sale of honey in that village in a few weeks.

In selling honey in the home market (or



anywhere else), careful grading is necessary. The product must, in all cases, be exactly what it claims to be. This is even more important in the home market than when selling to a commission house, for future sales depend on satisfying the customers.

Endeavor to have the grocer make it a point to push the sale of your honey. In order to do this it will, of course, be necessary to allow him a liberal margin of profit. It is better to do this, in most cases, than to attempt to sell the product direct; and even then you will probably realize more than you would from the commission merchant in the city.

One man of the writer's acquaintance,

whose whole business is beekeeping, sells his honey almost entirely to consumers, having regular customers in three or four small cities. Of course he can do little marketing in the busiest seasons; but he sells a good deal at times when the bees need no attention. This man sometimes finds he has more than he can sell to the retail trade, and then he drives to a village two or three miles further away, and disposes of it to the retail merchants. In the towns where his regular customers live he does not attempt to do business with the retailers, as they naturally know him and feel somewhat prejudiced against him. Fortunately for him, he lives in a locality where thriving manufacturing villages and cities are scattered thickly.

East Barrington, N. H.

## PUT YOURSELF IN THE CUSTOMER'S PLACE

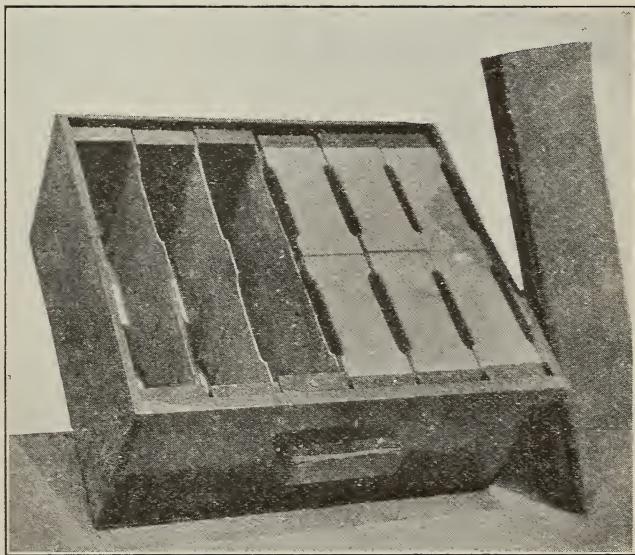
RUTH C. GIFFORD

We find that the easiest way to sell honey is to give the customers just what they want. Perhaps you think these kinds of customers are cranky. If they are, they are merely like everybody else. All persons are cranky if you know 'em. Besides, these customers generally use a lot of honey, and their trade is dependable.

As soon as the honey is off the hives, and cleaned, it is sorted, and the cases immediately packed for the customers who have likes and dislikes. Some prefer the pure white honey; others want the light and dark mixed. They claim it has a better flavor. Then there are some who don't think the light honey is fit to eat, and refuse to buy anything except the very dark.

The frequent request that puzzled me most was for sections that have no honey in the row of cells next to the wood. On inquiring I received a very interesting reply. In nearly all homes the honey is cut out of the wooden section before it goes on the table. Consequently the majority of the family never see how attractive the section looks with the cells neatly sealed close up to the wood. When honey is prepared for use from

these pretty sections, sealed cells have to be cut; so when it reaches the table the edges of the comb look smeary, and some honey is running over the plate. If the outside row of cells is empty the honey can be removed from the section so it will look very attractive when it reaches the table. There will not be a single drop of honey in sight until it is passed to the first hungry honey-eater. Now, when we have company and want it to look extra nice we always select a section which has no honey in the row of cells next to the wood, and the way people admire it amply repays.



Ruth C. Gifford's carrying-case from which she retails comb honey.

Sending out sections containing pollen is one thing against which we guard most carefully. The sections are always sorted in front of a window, where even a small amount of pollen will show dark thru the section. Nowadays people are not educated (?) to pollen, and the first bite into it by an innocent person is a sure guarantee of a lost customer.

A large part of the honey is sold in cases holding a dozen sections. We have never tried larger cases, because it would be useless. Some people even say these cases are too large.

Of course quite a number of people don't buy even a twelve-section case; so for supplying them we use twelve-section retail cases. In them are six section-holders, each containing two sections instead of four as in the supers. They also have division-boards. When one section is left alone in this length of holder it will not jolt around enough to damage it. The ends of the section-holders rest on cleats, so any leaking honey will go into the bottom of the case. Before the boards are nailed on the bottom, a piece of white table oilcloth is fastened on it, and then the boards on top of that.

In the lid, the boards are fastened together with strips of tin. The lid is perfectly flat on top, and is covered with tin or heavy building-paper. It has a cleat around the edge on the under side. After this case is completed it is stained inside and out a dark brown, and given two coats of water-proof varnish. When it is soiled it is wiped with a damp cloth, and even the shiny white oilcloth in the bottom of the box is soon as clean as ever. We have used this kind of case for several years, and it has given perfect satisfaction. It is needless to say the sections themselves are scrupulously clean. In every way we do all in our power to make the honey attractive.

If you have honey to sell, try to put yourself in the consumer's place, and imagine just how it would appeal most to you. Then fix it that way. For instance, if you value your trade *don't* wrap cases or sections in newspaper. Leave them unwrapped first. However, they are much more attractive in regular wrapping-paper.

I hear some one ask, "Does all this pay?" It most assuredly does. We have always had more demand than honey, and at good prices too.

North East, Md.

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## I AM NOT A SALESMAN

BY G. C. GREINER

From observation I know that beekeepers as a rule greatly neglect the most vital part of our pursuit. The financial success of all our beekeeping efforts hinges on the sale of the product. If we do not put forth the necessary efforts to increase our sales, all the increase of our crops will benefit us very little. In past years I have not done my best in this direction; and today I am not pushing things as I might. The only excuse I have for this neglect is that I am not a natural-born salesman. It goes against my nature. With the long experience of producing and selling honey I can do fairly well after the ice is once broken; but from choice I would rather stay in my honey-house or among my bees than start out into a section where I am not already acquainted.

Early this fall I received a postal card from one of my old customers who had moved from his former home to a new section of the city. The card requested me to deliver his usual winter supply of honey on my next market trip or whenever I could make it convenient to call. When I stopped at their house the lady of the house came to my wagon and selected quite a quantity of my goods; and while we were chatting

the lady of the next residence joined us with the intention of examining the contents of my wagon. She, too, made quite a purchase. Before she left the wagon a little girl stepped up to me and said, "Mr. Greiner, mamma wants you to stop at our house (the third in the row); she wants some honey too." This shows that people will buy honey if it is offered to them in attractive form, and made convenient for them to procure it, when otherwise they would never have thought of honey. If I had stopped at every house the length of the street, undoubtedly the majority of the inhabitants could have been induced to make a purchase. But I had been at the market, and was nearly sold out.

A neat attractive label is in many instances the means of increasing sales. It should not be too large to hide the contents of a glass package, but sufficiently conspicuous to attract the notice of the buyer. At our last summer's gathering of beekeepers I had a little discussion with one of our prominent members on this subject. He claimed it did not pay to go to the trouble and expense of using labels. He said he had his name pressed on his bottles for one



thing, and too many of the labels came off before the honey got to the consumer any way, so he decided not to use them any more. I cannot agree with our friend. It is true that once in a while a patch of labels does not seem to stick as well as at other times. When we are liquefying in cans a few may come off; but they are easily replaced, and the businesslike appearance of our goods compensates for the little trouble. A neat tasty label is certainly a great improvement, and helps sell our honey for various reasons. Its object is at least threefold. First, the guarantee being on the label, it insures the buyer unquestionable purity of the article. Second, the name convinces the purchaser that we are the actual producers—a conviction which again produces confidence in our goods; and, third, as I said before, the neat appearance of our ware attracts the attention of the passing crowd.

Time and again I have had people take up a can of honey, and, after examining the label, say, "That is the honey I want." Others ask, "Are you the Mr. Greiner yourself who produces this honey?"

When answering in the affirmative, a sale invariably follows. It seems to give a certain satisfaction to buy direct from the producer. People have less confidence in the genuineness of the article after it has passed thru three or four different hands.

That other branches of industry consider attractive labels of great importance can be seen every day when we step into our groceries and drugstores. All the shelves are lavishly decorated with goods of all descriptions nicely labeled. Why should beekeepers neglect their own interest and fail to improve the appearance of their goods when it adds so much with comparatively so little expense?

Another feature which the majority of beekeepers greatly neglect, and which in

many instances would increase the sale of their honey, is an attractive display at fairs, carnivals, and other public exhibitions. Until very recently I have been one of the "doubting Thomases" myself. I was laboring under the wrong impression that it does not pay. My first attempts along this line, in which I was interested many years ago, did not show any adequate results for the time and trouble expended. Besides, being otherwise engaged, I could not spare the time to attend properly to an effort of this kind. But since I have moved to my present home, conditions have been more favorable in regard to this matter. Having severed myself from nearly all business connections except beekeeping I could have managed to set aside the necessary time for this purpose; and my locality, being one of the best in the country in regard to the production of an extra-fine quality of honey, the effort of making a fairly passable display at fairs would not have inconvenienced me very much. And why did I neglect it? Simply shortsightedness. The old impression, "it does not pay," kept me from availing myself of the opportunity.

Recently it happened that the progress of our little burg, the building-up of the place with the rapidly increasing number of inhabitants, induced the men at the helm to propose and start a so-called "harvest festival" in the form of a general agricultural fair. Being a tax-payer and therefore more or less interested in public doings, I decided to contribute my mite toward the success of the undertaking by way of a little honey exhibit. I did not expect any direct financial gain out of the affair, and the result was, therefore, all the more gratifying when on my first market-trip afterward a lady accosted me something in this way: "If you are the exhibitor of that honey I saw at the fair, and you have any more. I should like to get a crate just like it."

La Salle, N. Y.

## WHAT I HAVE LEARNED IN SELLING MY OWN CROP

BY WALTER GARABRANT

I am situated where most of the honey customers are well-to-do, and many of them are wealthy. When I started I was located on a by-road; but for the last ten years I have been on a main macadam road. Since the advent of so many autos there are a few more transient customers who sometimes come again. I have always kept a small sign "Honey for Sale" in plain view of passers by, and the apiary may be seen from the road,

Salesmanship is almost a profession at the present time. Doubtless it needs to be if one undertakes to fake the public for a swindle. But almost all producers of small quantities of honey could be their own salesmen to advantage if they would give it some consideration. On the average, perhaps, they would be about as successful salesmen as apiarists if they would put forth reasonable effort along this line.

My honey is sold both at retail and

wholesale. When the crop is small it nearly all goes at retail. When larger, only a fourth to a third goes at retail. We have always peddled most of our farm products, and honey sales have been made mainly in connection with the sales of other produce. When we sell at wholesale it is usually direct to the retail merchant, not to a middleman.

It has always been one of our principles to sell to the nearest buyer who will pay the market price. This is sometimes our nearest neighbor. Thus we save time, transportation, and risk of lost payment, since we know the reliable buyers. This also relieves the larger markets, and gives better distribution. We have always tried to give a buyer what he wants or needs, sometimes refusing to sell when we knew it would not suit, or that it would give dissatisfaction later, and probably result in the loss of a customer. I cannot recall losing any of our customers because of dissatisfaction.

I am known as a "dear man," not as a "cut rate." Sales at retail are made at the best or average retail price for the quality; at wholesale at the best market price. Prices are usually set by the local markets, but sometimes by the larger city quotations in the papers. In this way we are on good terms with the stores and business men in town, and we can sell as we like. Because of lack of time I have never made a regular business of peddling honey in the large town where the large part of my wholesale sales are made. I believe a good thoro peddling of honey once a year at least would increase the honey sales as a whole for the stores. I have started a good many customers by an occasional sale.

I have a few regular customers in town who take honey when supplied with other produce. I have never had trouble in wholesaling my honey, both comb and extracted, at the stores, and usually at prices higher than the New York quotations. I could sell more if I tried. To start a new wholesale customer who is in doubt, or does not want to buy, if reliable I leave honey for sale on trial. I have never had any returned. I always sell for cash at the stores except in a few cases where the honey is delivered by others.

I have never advertised honey. Why should I when I cannot supply the present demand? However, I have always been ready to talk about bees and honey, and give any interesting facts about them. This may not have increased sales, but it has been at least the means of getting most of the storekeepers to take better care of their honey, and keep it on display.

My oldest record of sales is dated 1898, when the crop was about 1000 pounds. Since then the crop has varied from 400 to 2700 pounds. I know the average price per pound of that first crop was much less than of late years. I still have many of the same customers, both wholesale and retail. Some of them come back voluntarily, or send orders. A good many I keep after, by a notice of the new crop, or inquiry of some kind as to what they want. Many I call upon when the new crop is ready. I get advance orders from the storekeepers when I can; but most of them are regular customers, and their demand is about regular. The rest of the orders are taken by chance.

I have one retail route that I go over once in the early fall, and twice if time permits. This trip runs from 100 to 200 lbs. for the day's work. On this trip I am often able to dispose of the odd sections that do not case up well with the main lot. At first the customers on this trip took mainly comb honey; but the last season and the one before they took nearly all extracted, in jars. The demand changes—due, principally, to the more attractive appearance of the jars and the more convenient form for using a little and saving the rest for later use.

I have always had some good customers for such poorly filled and poorly capped sections that are too heavy to use profitably as baits. These are sold by weight at the wholesale price. Price tells here. It is seldom necessary to change customers for this grade often, and but little trouble to find a new one. In this way hurting the store trade with second-grade goods is avoided.

I have nearly always sold my good section honey by the box, always at retail. I consider it less apt to make the public critical on this point. However, I always grade carefully, and vary the price to fit the grade, especially to the wholesale trade. Thus a lighter section may sell, in a short season, for the same price as a better weight when the sections run heavy.

Enough dark honey is bottled to supply the demand in that form. The rest is sold in 2 x 4 quart tin cans. Because dark honey is cheaper, it always finds some sale, mostly to neighbors. A few prefer the flavor of the dark honey. I have also a considerable demand for two-quart cans of white honey. Many of these are sent by parcel post.

Sometimes it hardly pays to retail from the standpoint of profit alone; but the honey must be sold. Retailing relieves the wholesale trade, and usually stimulates and creates a demand for honey.

My principal honey-flow is from the



clovers—white, alsike, red, second bloom, sweet clover, of late years, and several seasons we have secured some from alfalfa. The season ends with the sumac, which is often the heaviest part of the flow. I have always made it a practice to get my comb honey off with as little travel-stain as possible. The extracted I want good and ripe, but not too heavy and sticky. It is stored in a good hot room until after the fall market. I have had the thermometer go to 110° F., generally 70 to 90. What I carry for winter is put in a warm dry room in the house. Doubtless the quality and flavor of the honey have much to do with repeat orders, tho tastes and opinion of quality differ very much.

The same label, and also a distinctive one, I find, is also a help in holding trade for the stores. Every section is scraped thoroly

clean inside and outside and usually stamped on the top as a guide to keep right side up. Cartons are used on all retail trade, but not on all sold at wholesale.

To summarize:

Sell to the nearest obtainable customer or market.

Never be "grumpy" if a buyer says no.

Get the best market price—don't cut.

Don't retail at wholesale prices. It's a waste of time and labor.

Give customers what they want or what you believe will suit them. Put the honey in the best marketable shape and appearance, but grade honestly. If the demand is short or lacking, create it in some way. Talk about honey and bees to any one who may show the slightest interest.

Be careful to keep up the quality of your honey.

Chester, N. J.

## MARKETING HONEY LOCALLY

BY JOSEPH GRAY

Variety is the spice of life. In years past I have paid considerable attention to an attractive and varied display of honey; but the purpose of this article is confined to supplying the local needs. When I see both comb and extracted honey brought 100 miles to be sold in this valley, while we who live here market at wholesale 500 miles or more distant, I think it is time to sit up and cater to the home trade. The reasons for this neglect are that no one will trouble with sections; and then, second, it is cheaper, if you own 1000 colonies, to buy in bulk by the carload, and sell in bulk. When I came into possession of an apiary I figured that, as I had to proceed on a smaller scale, the difference between 5 cts. wholesale and 7½ cts. to local buyers for extracted was worth the extra labor involved, also the production of a few sections in extracting-supers suitable for the local trade.

I present your readers with my label, and what it stands for as follows:

I have spent considerable time getting up labels. Let us pick this label to pieces:

1. Locality is not too prominent, but sufficiently so to attract attention. This is an alfalfa region, and the day is here when an American will purchase an article for what it is, and reject it if not so labeled. I try to build up an honest trade, and therefore I give prominence to the words alfalfa honey.

2. Ownership is not too prominent, and yet prominent enough to back up the guarantee.

3. The guarantee of purity and quality. I am at all times open to inspection to show that care and cleanliness are exercised to produce a pure article of standard quality. It is not my purpose to pit alfalfa honey against sage or orange, but to create and hold a local market for alfalfa honey.

**IMPERIAL VALLEY**

**ALFALFA HONEY**

FROM THE APIARY OF  
**JOSEPH GRAY**  
**HEBER**

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**Purity and Quality Guaranteed**  
**by the Producer**

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**NET WEIGHT 10 LBS.**

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NOTE: Pure Honey will Granulate or Candy. Candied Honey is an agreeable change from Liquid Honey. To restore Honey to its liquid condition, place the can in a pan of water heated to scalding (150 degrees), and allow it to remain until the Honey is liquid.

4. The net weight is a simple statement to comply with a wise law and ensure the customer's confidence.

5. The note is to enlighten a customer. Is there still ignorance as regards honey?

A word about cans. I have two kinds. One I like and one I do not. In judging displays of honey, 20 points out of 100 were allowed for the get-up of a display from the business standpoint, and often it is the little details that add to the effect as a whole. I prefer a can with a large frietion top and an ear soldered for the bail under the top seam. A non-rusting soldering-flux should be used. I do not like a can with a small lid, nor do I like to see considerable rusted surface about the ear from the use of acid in soldering. It gives the can a second-hand appearance.

Salesmanship is an art. Never let an

opportunity go by to place a simple statement to educate a customer. Above all, don't make their ignorance a laughingstock to others.

The art of selling to the grocer or to consumers is a good deal one of locality. If you have time to spare, the latter plan may pay; or if you are running a milk-wagon it may pay.

The producer is not the only one. The man who distributes and the man who sells over the counter need their share. Local sales from home are limited. Let us be charitable to the man who markets for us.

Heber, Cal.

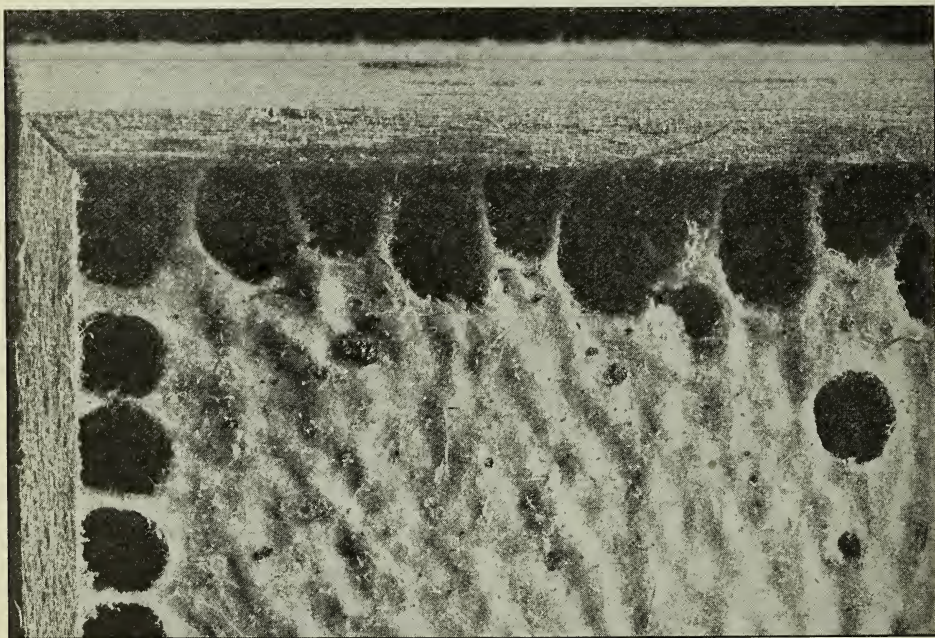
## AS GLIMPSED THRU THE CAMERA

**Good Appearance after all, is one of the Best Selling Points**

BY H. H. ROOT

The discussion on scraping or sandpapering sections between Dr. C. C. Miller and our Mr. J. E. Gayer, given on pages 655 and 656 of our August 15th issue for last year was very interesting to me, for the question of removing propolis from comb honey is a subject to which I have given considerable thought. I have tested a number of different power devices for doing the

work, including different forms of sand-wheels and sand-belts, but have always decided that a plain flat-faced pulley covered with sandpaper, with means for renewing the paper quickly, furnishes the simplest and best method of cleaning sections. While it might be strenuous exercise, I believe such a cleaner could be run by foot power. I tested A. E. Shore's cleaning-device, pic-



A corner of a section of honey enlarged to show the dust of wood and propolis scattered over the surface of the cappings. This trouble is caused by carelessness in cleaning the propolis from the wood.

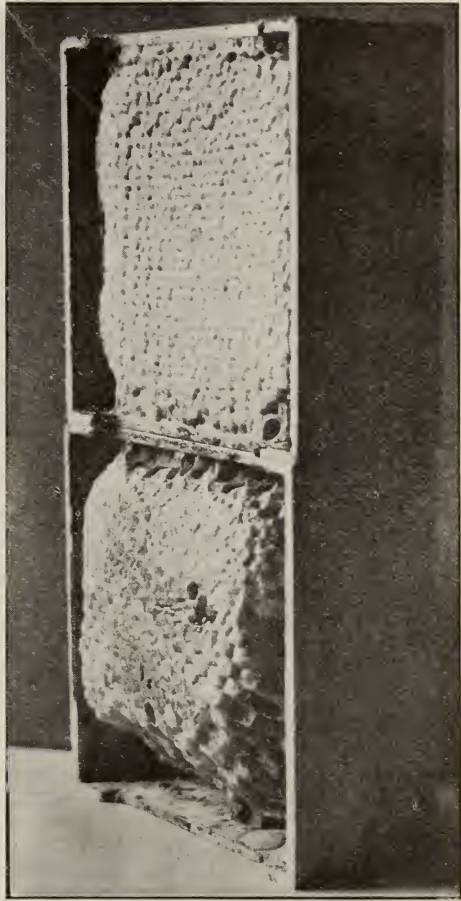


tured on page 591 of the July 15th issue, and Mr. Gayer tested it also, but neither of us liked it as well as the simple sandpaper-covered pulley. I have also tried revolving wire brushes; but the wire soon gets dull or fills up with propolis, and has to be renewed, and the renewal of a wire brush amounts to more than the renewal of the sandpaper on the surface of the pulley.

But in this article I did not start out to discuss all the different methods of cleaning sections. I merely wanted to picture a result very common—more common than one would believe—of improper sanding of sections. (I am not sure that the trouble is always due to sanding. Careless scraping might produce the same result.) I refer to the cleaning of sections, especially plain sections, in such a way that the dust of the wood and propolis is scattered around over the surface of the comb, making the cappings look “fuzzy,” and the honey itself, in the occasional open cell, very much speckled. A magnifying-glass shows clearly the minute particles of wood and propolis, sometimes not so very minute either.

Last summer Mr. Gayer showed me case after case of honey, almost any section of which, if one examined it closely, showed this same appearance. I picked out one which was bad, tho not as bad as some others that I have seen since, and made a photograph of it. Some may think this illustration exaggerates the appearance of the honey. As a matter of fact, while I tried to exaggerate it by enlarging, and by getting the light just right to show the dust to the best advantage, the honey itself looked far worse than this picture.

If a plain section is laid down flat on sandpaper, and moved back and forth in order to clean the edges of the section, the surface of the honey is almost sure to get pretty well covered with this dust. In a warm dry room the frictional electricity generated no doubt helps the dust to cling to the comb. To be sure, if every particle of dust on a section of honey could be carefully removed and put together in a little heap in a spoon it would not make a pile large enough to be noticed perhaps, even if it were all swallowed at once; and yet that dust scattered over the cappings makes the honey look bad, if one takes the trouble to look at it very closely, and that is the principal reason why the practice should be avoided. With beeway sections the dust feature is never quite as bad. At the same time (and let me whisper this so Dr. Miller will not hear it) I had the opportunity last fall of looking at some of Dr. Miller's own comb honey, and I found some dusty sec-



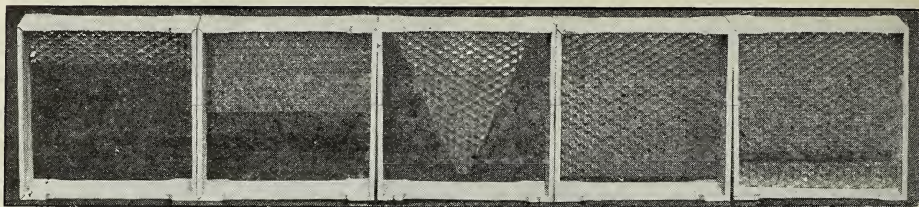
It is never good practice to ship bulged comb honey; and putting bulged honey in with good honey in the same shipping-case is inexcusable.

tions! I tried desperately hard to find a section bad enough to photograph, but could not, so I shall have to assume that Dr. Miller knows what he is talking about, for beeway sections at least.

Summing up the whole matter, it seems to me that the practice of laying plain sections down on sandpaper in order to clean the edges should be condemned. A better way is to use some sort of scraper for the edges of plain sections, and no doubt even of beeway sections, unless the operator is careful. Of course, the edge of the beeway, if badly propolized, has to be scraped any way if one wants his comb honey to look presentable.

#### FANCY AND CULL HONEY IN THE SAME SHIPPING-CASE.

The second illustration shows a couple of sections taken from a shipment of very



Five different styles of foundation starters.

fine comb honey—at least most of it was fine. The only bad thing about it was that every now and then a badly bulged or one-sided section was slipped in along with the good honey. Both of these sections were taken from the same shipping-case. Wherever this is done the surface of the comb of the bulged section is nearly always bruised as well as the section next to it. Bulged comb honey ought to be considered “unshippable;” at any rate, it should never be shipped with good honey. Aside from the bad practice of injudicious grading, shipping honey like this with good honey always makes trouble. The one mistake spoils two sections.

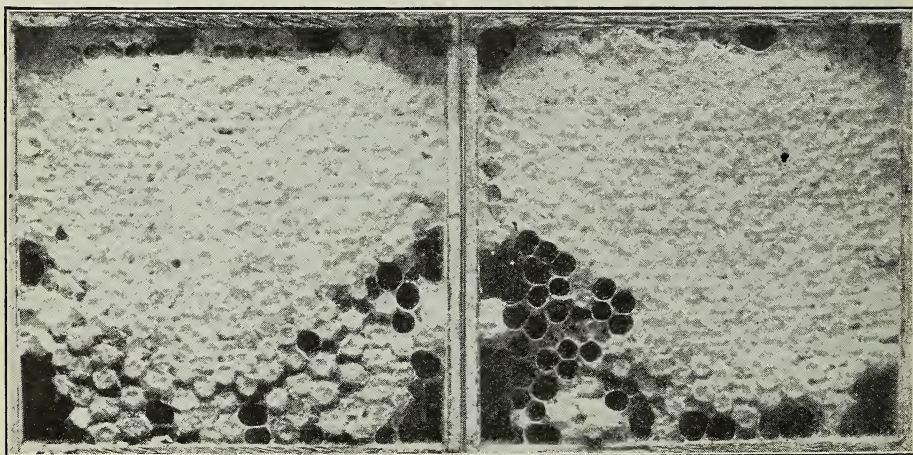
If shipping bulged comb honey were a rare practice, calling attention to the matter in this way would be foolish; but instead of being rare it is, unfortunately, very common. In most cases I suppose it is not intentional; but, like all other unintentional mistakes, bad results follow just the same.

#### WHAT IS THE BEST-SHAPED STARTER?

The third illustration shows five sections fitted with foundation—from starter to full sheets—and also a top and bottom starter. Every form of starter there represented has

its own advocate; but personally I feel that the last plan, that is, the double starter, as originated and recommended by Dr. Miller, has the most points in its favor. There is no question but that more producers are using double starters every year. It takes more time to put in the extra starters, it is true; but it is time well spent. Many do not use the right sizes. In giving the right sizes I can do no better than to take Dr. Miller's words from “Fifty Years Among the Bees.” Speaking of super foundation,  $3\frac{7}{8} \times 15\frac{1}{2}$ , he says, “This size is just right to make four top starters  $3\frac{1}{4}$  inches deep and four bottom starters  $\frac{5}{8}$  inch deep. Occasionally a bottom starter of this depth makes trouble by lopping over, but not often, and a shallower starter is more likely to be gnawed down by the bees. Moreover, I think the deeper the bottom starter the more properly the two starters are fastened together.

With two starters of this size, and a  $4\frac{1}{4}$  section, there should be a space of  $\frac{1}{8}$  inch between the two if it were not that the space is made larger by the melting-away of the edges of the starters when they are put in the section.



The result of leaving old sealed honey in bait sections. The finished product is patchy and discolored. The photograph does not tell the whole story, for the old honey looked its age and more too. Sealed honey in bait combs should be uncapped, and the comb shaved down quite thin.



## NEW DESIGN NEEDED FOR COMB-HONEY CARRIERS

BY F. GREINER

For some years I have been shipping my comb honey without the use of carriers for the shipping-cases for the reason that I have been enabled to load whatever the number of cases I wanted to ship in thru cars with fruit being shipped from this point in car lots. I have quite a quantity of the carriers on hand, but I make use of them only on rare cases.

The supply dealers are not aware, it seems, that a different ruling is in force now as to these carriers. The fact is that the railroad companies in the East will not accept such carriers as are now listed in the new price lists of 1916. The old design was all right up to the fall of 1915; but at this time the carrier must be enclosed all around—in other words, it must be a tight box. I was put to the trouble of unpacking a small shipment last fall and remodeling the carriers to meet the requirements. Another beekeeper here had to unpack his whole crop and fix the carriers over, making him a very unpleasant and laborious job, to say nothing of the extra amount of lumber that had to be used.

Our transit companies get some funny ideas into their heads sometimes—for instance, the ruling now in force on egg-crates. These must be just so—regular style, nothing codgelt up will be accepted. I attempted to ship a crate a few days ago which had been remodeled from a substantial lemon-box. The express office called me up and told me that I must come back and repack the eggs into a regular style of crate. Manufacturers of carriers will do well to see to it that their carriers conform to the rulings of the railroad companies.

HARMONIOUS COLORS FOR LABELS.

For honey-labels of any size, particularly

for tin packages and pails, a white and yellow background with black printing harmonize well. Let the white paper be covered all over with light-yellow bees—no sharp dark lines in the bee—white lines drawn all thru the bees, to make the bees not inconspicuous, but to appear, from a little way off, as a very light yellow with the white paper. Upon this paper should be printed in very large conspicuous type the word "Honey" so when a pail or can stands on the grocer's shelf it may be easily read from a distance. The less other reading on the label, the better; but the name and address of the producer as well as the number of pounds or ounces should be given. Such labels might be made of any size, from very small, suitable for section boxes or small tumblers, up to 60-lb. cans, etc. They should not be very expensive.

A straw skep could also be used in the manner above mentioned for a background in lieu of the bee. For honey labels nothing could be more appropriate.

SENDING GRANULATED HONEY BY PARCEL POST.

There is nothing to hinder the shipping of granulated honey in tin—possibly in paper also—by parcel post. I have not dared to send liquid honey in this manner, although put up in friction-top tin pails.

We must guard in every possible manner against the possible soiling of other mail matter with honey. A package of comb honey was retained in our postoffice here because of the leakage. It is not practical to ship comb honey by parcel post except when put up in tin and tightly sealed. Comb honey will always be badly broken in transit when shipped by parcel post.

Naples, N. Y.

## MARKETING HONEY ON RUBBER TIRES

BY LEWIS L. WINSHIP

During the season of 1915 I produced about 500 pounds of honey in all—a little more than 400 pounds of which was extracted. About half the extracted, and all the comb, was sold at home.

As we own an automobile, and were selling other things from house to house, I hit upon the idea of carrying a few dozen jars of honey. This plan did not occur to me until the latter part of August; and from that time on, ten or twelve dozen jars of honey were a regular part of our load. I

sold these jelly-jars of honey, holding an average of eight ounces, for 90 cents to \$1.25 a dozen. They moved readily; and at nearly every store where they had none on hand I made a sale. These first sales were necessarily small—only a dozen or two in a place. I was counting on only the one sale; and wherever I sold any I took the name of the firm for future reference.

My own honey was soon sold, and I saw that I would have to buy outside honey if my side line was continued. I ordered 120

pounds for a trial, and soon saw that an order of that size was only a drop in the bucket. I forthwith ordered four cases more, and about a week later we had a breakdown on the road which wound up my wholesale honey sales for 1915.

From this method of selling honey I learned that:

A neat label attracts attention.

Bright tin caps are preferable to old rusty ones.

Price cuts a small figure if the honey is irresistible in appearance and taste.

Dark honey can be bottled and sold, if agreeable in taste.

A majority of retailers are ignorant regarding honey.

In regard to the latter I found that many up-to-date storekeepers thought extracted honey was spoiled when candied. Many of them said they would try a dozen jars of honey if I would guarantee it not to candy.

Against this condition I was obdurate, and explained that all extracted honey would candy in time. When I told them that this candying was a good test of its purity, I suspect a great many doubted my sanity. If not, they certainly looked as tho they did. I also explained how easy it is to reliquefy this candied honey; and probably by telling this fact I killed some sales, for many would take no more when they found they could liquefy what they had.

I have sold considerable honey around home in one-gallon tin cans; and I find that the only objection to this is the spoiling of the appearance of an otherwise beautiful product.

I have peddled some honey, but find that ten cents is all one can ask for an eight-ounce jar. For nearly all I have sold wholesale I have received \$1.25 a dozen. According to this I am losing five cents a dozen by peddling it. This certainly does not make

me feel like peddling honey when I can get \$1.25 a dozen wholesale.

From now on I think that I shall confine my efforts to selling from an automobile. By doing this I can sell ten or twelve dozen jars a day; while by peddling, three dozen is quite a day's work. Of course, after one gets his home market educated to use only his own honey he may be able to sell in larger quantities. At present the high prices of everything are tending to make people buy all their commodities in smaller quantities. Years ago, when people bought their winter's supply of potatoes and other things in one lot they were cheaper. Now they buy a peck of potatoes at a time, and pay from two to three times what they would by purchasing in bushel lots. The same thing applies to honey, and few people buy a winter's supply at once. The reason for this is obvious; few people have the ready money to lay in a winter's stock of anything. I had only one customer last season who purchased more than a gallon can. He purchased eighteen pounds, and no doubt thought he was buying a supply for life.

If all consumers would use as much honey as the beekeepers themselves, marketing honey would be simple. Last summer, when I took off honey I reserved 55 pounds of extracted for our own use, and in a short time little was left. We have a family of nine honey-consumers, and very little in the way of honey escapes.

My average profit per dozen was 50 cents. Possibly this profit will vary slightly with different localities on account of different prices per pound for honey. Perhaps some beekeepers may feel that it is worth the fifty cents per dozen to bottle and haul the honey around the country. If breakage were bad it probably would take all the profit, but I have yet to break the first jar.

Springville, N. Y.

## SELLING A CROP BY SAMPLE; HOME TRADE VS. WHOLESALE

BY GEORGE DODDS

We started the season of 1915 with 45 colonies (35 fair to good ones, and 10 weak ones). The 35 stronger colonies we ran for honey, and the weaker ones for increase. About 20 colonies were run for extracted honey, and 15 for comb. The white crop amounted to 1850 lbs. extracted honey, and 1000 sections. The buckwheat flow was a total failure, and I had to feed for winter.

As this was the first time I ever produced any extracted honey I had to do some figuring to get rid of it at any price at all, as I had no call for this kind of honey. First,

I ran a small advertisement in our home paper to let people know I had extracted honey. About the last week in August I inserted the following:

### A TON OF HONEY FOR SALE.

Bring a container on or before Sept. 5 and get your winter's supply of white extracted honey direct from the tank at 10 cts. per lb. A valuable honey-recipe book given with every order. After that date old prices will prevail—5-lb. pail, 60 cts.; 10-lb. pail, \$1.10; also comb honey by the section or family size case (15 sections).

GEO. DODDS.

During the ten days previous to Septem-



ber 5 I sold about \$75 worth of extracted and comb honey, the neighbors bringing all kinds of containers, but mostly one and two quart fruit-jars and gallon maple-syrup cans.

In about two weeks the following was inserted:

READ  
Prov. 24:13, and heed the divine command.  
GEO. DODDS.

This one furnished plenty of comment, as we heard from it a great many times. Every one had to look it up at once upon seeing it.

As I am not able to get out among the people to sell honey I had to think of some other means, as the advertising was not bringing many sales; even the wording was changed often. I sent samples to many places, but none wanted extracted honey at even a reasonable price. The best offer was 6½ cts., delivered in Cincinnati. This would mean about 5 cts. clear above containers and freight. I thought that good white honey ought to be worth more than this, so I ordered several gross of No. 40 bottles and corks and had the following label printed.

I AM A SAMPLE OF  
DODD'S EXTRACTED CLOVER HONEY.

Taste and note my delicious flavor. I am put up in 5-lb. and 10-lb. pails at 60 cts. and \$1.00 respectively. Phone 112-2 or drop a card to Dodd's Apiary, Cambridge, N. Y., and your order will receive prompt attention.

I next filled a good supply with honey and handed them out to any one interested and to many who were not, and from the latter I secured many of my best customers.

This plan began to move the honey quite rapidly, as I would always have some of the

samples with me; and if some one would happen to be going to the city I would give them several to hand out, explaining how we would mail the pails crated, and what the postage would be. The result was that quite a number were sent to neighboring cities; and several, thru friends, were sent to New York. Many times one sample sold several pails. The beauty of it was, the sample and label did all the business, no explanation being needed.

Today, January 12, I have but four five-pound pails left. This means that 1700 lbs. was sold at home, or mailed, at between 10 and 11 cts. above the price of the container. The remainder was shipped away at 9 cts. in 5-gallon cans.

Now for the gain over selling at wholesale at 5 cts. net per lb.: 1700 lbs. at 5 cts. \$85. The 1700 lbs. at home brought \$175; \$175 less \$25 for advertising, bottles, corks, labels, and honey (for filling the same) left \$150 for the honey instead of \$85—a gain of \$65 in money, not counting my work, and I have about two gross of the bottles left for another year. There is one thing that will offset my work, and that is worth more than \$65 too. That is, the customers I have for future years, as many of them are people who seldom if ever bought comb honey, and have now had from one to five 10-lb. pails. One family has had fifteen 10-lb. pails besides some comb honey. It will not be as hard for me to sell double the amount another year, as last year was my first year in producing extracted honey.

Many will probably say that my price was too low for honey to the consumer, and no doubt it was; but considering the market I think it was the proper time to work up a trade at home, even if it has to be done at somewhat of a sacrifice.

Cambridge, N. Y.

## SELLING EXTRACTED HONEY BY PARCEL POST

BY J. B. MASON

With a great deal of interest I have read the various articles on this subject that have appeared in the different bee journals. I spent good money in finding out what price would be attractive. Of course, there is a difference in different localities. I also spent some money in finding the size package that takes the best, and proved to my own satisfaction that it is not the smallest package, and yet the small packages are kept on sale in all cities and towns. The impression is that the honey in them is "store honey."

After trying the small packages I decided

to give the quart screw-cap cans a trial. In a few papers I advertised in the classified columns, and got returns enough to set me to studying. I finally had the following ten-line electrotpe made and used it in a few papers.

EAT MAINE HONEY.

3 lbs. Clover Honey by Parcel Post anywhere  
within 600 miles, 60 cents.

J. B. MASON,  
Mechanic Falls, Me.

On the left was a picture of a bee and on the right a can of honey. It took like

wild fire, for orders came with a rush. There were also a large number of repeat orders from people who said that the honey was the best they ever tasted.

In the last two months I have received over one hundred orders from one religious paper, having but a small circulation. I attribute this success to the fact that the advertisement showed at a glance just what would be sent—the two-quart screw-cap can. This advertisement has not only sold honey in these packages, but in ten-pound pails and five-gallon cans. It has also sold comb honey.

A plan like this does not end in one season. The people are educated to eat honey, and I am sure that there are many families to whom I have sent honey in this way that have not been in the habit of using honey heretofore.

I am writing this in the hope that the beekeeper who has produced a few thousand pounds of table honey may have a way in which he can get the most out of his crop, and at the same time develop the home market.

Mechanic Falls, Me.

## MOVING A COLONY TO PREVENT SWARMING

BY J. D. HULL

We have been producing comb honey only for the last four or five years. Last season we had eight out-apiaries besides the home yard, the furthest being sixteen miles from home, and the nearest about two miles. We have three Metz cars that we use for traveling, hauling supers, etc. We have one car fixed into a light truck.

We try to get around to each yard every five or six days during the swarming season, and look into every colony that is strong enough for swarming. We do this by tipping the hive up so we can look for queen-cells in the bottom of the hive. If any such cells are started, nine times out of ten we find them on the bottom of the combs.

We used to follow the shaken-swarm plan, but have discarded it of late years, as it took too much time and work. For the last three or four years we have been practicing moving to stop swarming. When we find a colony that has the swarming fever we move it to a new stand and put one in its place that has not got the swarming fever, leaving all of the supers from the colony that was getting ready to swarm on the one we put in its place. If we can we let two or more field forces enter the one colony that has not got the swarming fever.

We always put all of the supers on this last colony with usually an extra empty one or two on top. When the first super is one-half to two-thirds full, the empty one is put under it, and an empty one is always kept on top.

Last season was a fair one. We got about two cases to the colony, spring count, with an increase of about 200 colonies. We put 500 in winter quarters last fall. Practically all of the work thru the honey-flow and swarming season was done by myself, as my brother, who is in partnership with me, has charge of the farm where we live.

This way of treating colonies for swarming will usually stop them for about one week. If I find the bees are getting ready to swarm, on our next visit they are given the same treatment again. This way takes much less time than any way we have found yet. In this way I work two, and frequently three yards a day.

Honesdale, Pa.

## THE DEATH SONG OF THE WORKER BEE.

BY GRACE ALLEN

They will say I have died, but I know

I have lived! Tho life fled

While I claimed it and loved it so,

I shall love it until I am dead.

I have crowded it full of delight,

Of labor and zest and the flight

Of dream-driven wings in the sun;

For lives that are yet to be

In the days that I never shall see,

I have thrilled to my work—and won.

In the odorous heart of the hive

What days I have known!

The still-looking larvæ so live—

I nursed them until they were grown;

Or, hanging so hushed by the wall,

I bultied it waxen and tall;

Then out thru the maze of the light—

For you, all you coming ones, you!

Went plunging and veering so true

To the flowers out of sight.

Swift workers, who hum as you pass,

I have crawled off to die;

Here, out of your way, in the grass,

With wings feebly fluttered, I lie.

All ragged these wings now and worn,

But what dreams-coming-true they have borne

Home—thru the sun!

Ah, Death! tho you silence my song,

I shall live—I shall live ages long

Thru the deeds I have done!



# Heads of Grain From Different Fields



THE BACKLOT BUZZER

*Beats all, the way the bees are working this summer. Mother says she don't know what to do, for the artist hasn't left enough space in this picture for more than two more supers.*

## Bees an Aid to Honey Sales.

A public demonstration in front of a grocery, showing a case of bees, with an interesting continuous talker on the life of the bee, will always draw a crowd of interested listeners who will take the wonderful statements of the beeman and tell these tales to their friends, that they may come, see, and hear.

The queen will always be found interesting, and the people will want to see her. The wonders of nature interest people when they can get the knowledge in an easy way. Some will go to the books to verify the statements. Should the sample of honey please, they come for more and for a larger quantity. Then they give some to their friends, and tell of the wonderful find.

The talker explains that the bees visit flowers, gather nectar, which, before being placed in the comb, must be evaporated—that is, ripened by the heat of the hive, and all water removed.

Groceries are poor places to sell honey, as the clerks lack the interest and energy to talk friendly with the public, and never know enough to tell of the food value of honey nor to keep the honey and jars looking bright and clean so as to be inviting. Therefore honey is sold only to regular users, and they gradually fall away.

Labels, to be a help to honey sales, should be plain, as a beeman's work should look. Flashy labels give the appearance of a manufactured article, and the government guarantee has a wrong effect on sales.

One of the largest packers of honey in Los Angeles twenty years ago sold from the 60-lb. can, but was induced to pack in jars. Now his sales are \$50 a day, or 1000 cases a year. Every jar sold makes a friend of the buyer, and is a standing advertisement for the store—a powerful aid in the development of the business generally.

Los Angeles, Cal.

S. K. Bennett.

## This Plan would Sell Honey Anywhere.

Last September I had a lot of extracted honey left over—ripe, rich, and fragrant, but very dark. I should have been glad to get 5 cents a pound for it; but I sold it all for about 8 cents a pound, and could have sold more. This is how I did it:

I took about three dollars' worth of short advertisements in three local papers, and paid for them in honey (extracted) at ten cents. I suggested that the readers would be interested in the strange natural history of the honeybee, and the papers gave me all the space I wanted.

I also shipped some to Mobile, and spoke to the editors of the Register, one of the biggest and best papers in the South, and they were glad to get the articles. Then I gave the sale to just one firm which advertised the fact, and the honey soon vanished. It was only a few hundred pounds all together, but the experience was illuminating.

Mobile, Ala.

H. A. Moody, M. D.

## Cells Completely Covered with Comb.

I had prepared a Hoffman frame for raising some queens from brood of two choice queens. The frame had a strip of brood foundation in the upper part, then a thin bar about midway, coated with wax on which the cell cups were fastened with wax. Royal jelly was put in each, and young larvæ introduced as near two-day larvæ as I could get. Just as I got the bar prepared, a large swarm came from one of my best hives. I had trouble in getting it, because it settled in the fork of an apple-tree. I sprayed the bees with water and removed two-thirds of them into a half-bushel basket, and emptied them in front of a colony with queen-cells only. Most of the bees refused to go in. The queen must have gone in but was killed. Within two hours practically all the bees of the swarm had gone back to the old stand. It was a bouncing colony. I opened it up carefully, cut out every queen-cell, and introduced my queen-cell frame. I thought I had a choice place. The next morning the bees had drawn out six cells beautifully, and the larvæ had tripled in

size over night, it seemed. I noted the date and closed the hive.

When I opened the hive again, five of the queen-cells were enveloped in comb until they were as large as walnuts and spherical in shape. You could not see the queen-cells at all, and no one could have guessed they were there. The sixth cell was the center of a beautiful piece of drone comb filling the whole space to the bottom-bar.

In looking thru the hive I found three queen-cells built up from their brood. In disgust I removed my carefully prepared queen-cell frame and proceeded to investigate my balls of comb. There was a nicely developed queen in three of them. The others, for some reason, had not developed. It may be that I injured the larvæ in grafting. The foundation above was drawn out, and filled with honey.

Yesterday I gave this colony ten cells on the same frame, and now they can raise no queen-cells from their own brood. This morning they have seven as fine queen-cells as I ever saw, the larvæ growing finely. I wonder what they will do this time. I hope they will make no more walnuts with queens as kernels. H. B. Arbuckle.

Maxwelton, W. Va.

#### What is a Strong Colony?

Some of my colonies had ten full frames of brood, and I felt quite proud of them. I examined a lot last week owned by a neighbor, and one queen had thirty-five frames of brood! I want to know what big beemen call strong colonies.

St. Albans, Vt.

A Beginner.

[Any queen that would keep ten combs full of brood should be called a good queen, and her colony would certainly be a strong colony. Those who use twelve-frame hives expect a queen to keep at least twelve combs of brood. Occasionally there is a report from a beekeeper who expects his queens during the early part of the honey-flow to have two ten-frame brood-chambers pretty well filled with brood. A good deal depends upon the size of the colony, number of nurse bees, strain of bees, age of queen, etc. A queen that had thirty-five full-size combs full of brood would certainly be some queen.—Ed.]

#### Honey to Moisten Gummed Labels.

Dr. Miller's recommendation to have the label long enough to reach around the pail and lap over would be excellent if there were no other way to make a short label stick. One drawback to the doctor's method is this: A label that would fit a five-pound pail would be worthless for a sixty-pound can or for one-pound glass jars.

I use a gummed label, the dimensions of which are about 3 by 4 inches, and I use it on any size of package. It is true, the gum alone is virtually worthless so far as securing any adherence to the tin is concerned. But by using a stiff brush to smear a thin

coat of warm honey over the gum, the label will stick, not only till the cows come home, but until these same bovines become superannuated. The philosophy underlying the phenomenon is that with any paste or gum with which I am familiar the power of adhesion decreases as the temperature goes down; it does not require a very low temperature to cause the label to curl up and fall off. But with the honey the colder it gets the tighter it sticks, and it adheres about as well in a high temperature as the gum commonly used.

I have never tried the use of honey on an ungummed label. It is but little more trouble to anoint the gum with honey than to moisten it with water, and it does obviate the everlasting necessity of resticking labels.

Has any one tried to compound a paste with honey as one of the ingredients?

Kansas City, Mo.

D. D. Downing.

[Honey with ordinary flour or starch paste makes a mixture that moulds easily. Used with the prepared pastes it is very satisfactory.—Ed.]

#### Wings Not There to Clip.

Tell Dr. Miller that if he had understood me properly, page 521, July 1, I am sure he would not have any reason for not being "on speaking terms with me." I did not compare him to a queen. I have never accused him of being regal. If he were a queen I am sure it would not be necessary to clip his wings, for he has none; and if I were at the clipping business with him, and wanted to keep him from getting away, I would, in spite of all the plea he has made, never stop at clipping off one leg. I would take both, and then I have no doubt the bees would have the good sense to supersede him in a very short time. See Stray Straws, July 1.

R. F. Holtermann.

Brantford, Ont., Can.

#### More Super Room Needed.

Will I be liable to need an extra super on hand to care for a new swarm of bees from either an old colony that put out a new swarm of bees June 30, 1916, or from the new swarm of June 30, 1916? If so, how many new hives am I liable to need for said bees during this season?

O. S. Baneroft.

Bradford, N. Y., July 5.

[The first swarm will not be likely to cast another swarm this season; but the old colony, unless watched, may send out a second, third, or even a fourth swarm. The first swarm may need an extra story of room for the storage of surplus, and the old colony also may need extra room if the second and third swarms may be kept back, which is usually done by destroying the queen-cells.

From your statement you had better have two extra supers, one for each colony. We would advise full sheets of foundation for either extracted or for comb honey.—Ed.]



A. I. Root

## OUR HOMES

Editor

For God so loved the world that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life.—JOHN 3:16.

And John answered and said, Master, we saw one casting out devils in thy name; and we forbade him, because he followeth not with us. And Jesus said unto him, Forbid him not; for he that is not against us is for us.—LUKE 9:49, 50.

The first text is an old familiar one. In fact, it has headed my Home papers several times in the past forty years. Just now I wish to call attention to that word *world*—for God so loved the *world*. Does that word “world” mean this beautiful planet on which we live—hills and mountains, fertile valleys, etc.? Not so. It means mankind, humanity, the human race. Somebody said recently there would not have been any world nor any planet had it not been for the purpose of furnishing a place for humanity to live. God loves humanity, and he wants humanity to have everlasting life. How little do we comprehend the full import of the words *everlasting life*! The dear Savior said, as you may recall, “Whosoever liveth and believeth in me shall never die.” I wonder if we think of this verse enough, and realize what it means. If God our creator loved the world, and still loves it, we ought also to love the world, to love humanity, and to love our fellow-men; and when we in our feeble way undertake to help in the great work of raising humanity, we get a thrill and a joy that we can get in no other way.

Just a day or two ago my youngest daughter came up with a fine-looking man by her side, and asked me if I knew him. He was well dressed, looked smart and bright, and something in his face recalled years ago. But I could not catch on until he explained a little. When he said that he was Ransom Murray I began to understand. In these Home papers about thirteen years ago I told about finding a boy in our Medina jail who was almost twenty years old, and could neither read nor write. His offense was for climbing on a freight-car and stealing a ride. He was soon let out, and went to work for the A. I. Root Co. When I told about it in Our Homes my daughter Carrie, who was a teacher then, volunteered to teach him to read and write, and a little later he united with our church, and now he is a bright, skillful, intelligent, and useful man. What a thrill it gave me as I realized the outcome of a little help and a little good advice at a critical time in a boy's history! Let us now digress a little.

Yesterday, July 14, was a red-letter day to me. I was coming home from the “cabin in the woods” in northern Michigan, and I was in a hurry to get home; but when I got into Detroit and learned that the boats did not run to Cleveland on Fridays I was considerably disappointed. Then I remembered similar cases when my plans had been interrupted and I had asked the dear Savior to guide my erring footsteps and show me *his* plans and what he had for me to do. I soon found some good friends whom I had learned to know and love down in our Florida home. They were located in the suburbs, and were very glad to take me with their little Ford automobile, among other things, to see where the Fords are made, or the “tin Lizzies,” as somebody has nicknamed them. While we were discussing the Ford enterprise my good friend Mr. Flower told me something as follows. He said he was not sure he had the details all straight. I presume all the world knows that one of Mr. Ford's special hobbies is to make good men out of bad men. Right here let me give you a little clipping from one of the little books sent out by the Ford company. It will be a good introductory to my story:

## THE FORD IDEA IN EDUCATION.

The impression has somehow gotten abroad that Henry Ford is in the automobile business. It isn't true. Mr. Ford shoots about fifteen hundred cars out of the back door of his factory every day just to get rid of them. They are but the by-products of his real business, which is the making of men. William Carey, cobbler and missionary, asked as to the nature of his business, said: “My business is extending the kingdom of God, but I mend shoes in order to provide money to carry on my work.” Mr. Ford's business is the making of men, and he manufactures automobiles on the side to defray the expenses of the main business.

What an idea that is, friends!—the making of automobiles is only a “side issue” to Ford's lifework.\* I think I have told you several times that when I first got up to speak in a union meeting I said something like this to our Medina friends:

“My friends, you all know I have always been a very busy man, and I propose to be a very busy man still; but, God helping me, henceforth I mean to be busy for Christ Jesus first and for A. I. Root afterward.”

You see my declaration then was that my little factory, then just starting for supplying beekeepers and taking their money, etc., was to be a side issue to the main business

\* I clip this from a Ford pamphlet:

Henry Ford once remarked that making automobiles was merely a side line with him, that making men was his real job.

of spreading the glad tidings of God's love; and may God grant that it may be the same after I am dead and gone, for it is my aim to build up first "the kingdom of God," and a great business second. Well, now for the story told me by friend Flower. It may be fiction, but I give it for what it is worth.

He said one of the greatest and most useful men in that company of over thirty thousand came to Ford's attention years ago something in this way. The fellow had succeeded in defrauding the Standard Oil Co. of a good many thousand dollars. He was convicted, and sentenced to ten years in the penitentiary. They proved it against him, but he had so skillfully manipulated the books and covered his tracks that even expert accountants could not tell *how* he did it. They puzzled over it in vain, and finally offered to remit the sentence and set him free if he would divulge the secret—that is, the plan he had worked out to swindle the great corporation. Ford heard of it, and thought that a man of such ability should be of at least *some* use to the world, and so he employed him; and as he made himself useful in developing Ford's business his wages were increased. But he was restless, and wanted to cut loose so he could use his talents in a wider way. But I think Ford finally offered him \$50,000 a year to stay at his plant. But he refused to take even so princely a sum; but as a sort of joke he told Ford he would go on without any salary if he would allow him a dollar for every automobile they put out. Now, friends, you can see something of the outcome. When they succeeded in making a million automobiles this ex-convict got a million dollars.\*

Well, friends, about a year ago I wrote the Ford company that I saw an automobile dealer in the great city of Akron who sells perhaps hundreds of high-priced machines, and he advised me to buy a Ford if I wanted to go by land to Florida; and he said this, even tho he had never dealt in Ford's machine in any way. I gave it in substance in GLEANINGS, and a copy of it was sent to Ford's people. This little inci-

dent introduced me to the manager of the advertising department. By the way, the Ford people have never given us any advertising; and I told their advertising agent, Mr. Russell Munro, that on the whole I was rather glad they had not given us any, because no one could now say that the write-up I gave them was in any way, even indirectly, paid for. Let us now get back to the humanity which "God so loved."

After I had become somewhat acquainted with the manager they called in an expert and gave him orders to "show Mr. Root everything he wants to see, and answer all his questions." This expert who went along with me was Mr. A. Lee McKay, the "courtsey manager." I told him I wanted permission to give them full credit in print. Perhaps I should explain that great crowds of people are being taken thru the works day after day by one or more guides; but instead of sending me with the crowd they gave me a personal guide; and it was a little tough on the guide, not only because I am a little deaf, but because I am an old man. He had to take my arm and twist me around thru the machinery, and then shout in my ear to make me hear. By the way, years ago when I used to take my good old mother thru our factory she did not care very much about the new automatic machinery, but she was greatly interested in looking into the smiling faces of the boys and girls who were running the machinery; and on this wonderful trip on that afternoon I honestly believe it is true that, while I was interested in the wonderful machinery, I was more interested in the great streams of humanity that were before my eyes constantly. Just think of it! There are something like 30,000 people employed in that great pile of factories, and they are mostly married men, because the preference is to give a place to men with families or boys who have mothers to support. That is a part of the Ford management.

Friday, July 14, was a terribly warm day in a good many places as well as in Michigan; and the first thing that interested me was their plan for supplying pure air, and to have the air as cool as possible. Their apparatus for supplying pure air free from dust, and sufficiently moist, is perhaps ahead of anything else in the world. Next come their arrangements for supplying *pure cold water*. In many places the workmen are obliged to work with artificial heat, say in handling furnaces and hot metals, and also in the japing department. Well, there are great glass bottles full of cold pure water everywhere; and every workman, big or little, has a drinking-cup

\* Just think of it, friends. Here was a man whose talents and ability, astonished the world, and yet he might have been doomed to spend ten of the best years of his life in the penitentiary. The trouble was that he had made the mistake of devoting his wonderful ingenuity to the robbing of a great multi-millionaire syndicate instead of doing something to bless and benefit his fellowmen. The boy I have mentioned, who could neither read nor write when he was almost 21 years old, did not seem to get on well with his teachers. If I remember correctly he had been told there was no use for him to go to school, for he did not learn anything. When my daughter Carrie took him in hand he did seem a little peculiar, and yet in a short time he was able to write a letter to his poor old mother, who had not heard from him in years.



in his pocket. The bubbling fountains we see in so many places are all right; but with such crowds as they have here it would be next to impossible. These water-bottles are not only located handy to everybody, but a boy with a cart holding six bottles is all the while traveling around the room ready to replace any empty jar. I clip from one of their books as follows:

There is a department, enrolling about 500 men, whose duties are to keep the floors swept clean, the windows washed—in fact, to keep the sanitary conditions surrounding the workmen as nearly perfect as possible. The floors of the entire plant are scrubbed at least once a week with hot water and a strong solution of alkali, which removes the grease. Another department, of about 25 men, does nothing but paint the walls and ceilings of the factory, keeping everything fresh and clean.

As light is a very important matter, not a pane of glass in that great institution is suffered to get the least dusty. My good friend, let us pause a moment. How are the windows to your barn, workshop, poultry-house, or any other building you may have at just this minute? If this Ford concern can afford to keep every pane of glass scrupulously clean in their great establishment, how is it with you?

Notwithstanding the fact that Mrs. Flower was with us on that trip, I told Mr. McKay there was just one thing more that interested me as much as anything else—their public-comfort room or closet arrangements for men. He made the remark that if I saw one of them I saw the whole of them. Said he, "Here is one right here. Let us look at it."

By the way, these toilet rooms are supposed to be within a few steps of every one of the 30,000 workmen. Shall I tell you why I especially wanted to see the men's toilet or lavatory, as it is sometimes called? I especially wanted to see if there was any tobacco juice squirted off in the back corners where it would be a hard matter to get at it with a broom or scrubbing-brush. I wonder if every man in the employ of the A. I. Root Co. will read this. I hope so. Well, I guess I did see a few traces of tobacco or stains where there *had been* tobacco spittle. But the room was far in advance of what you see in hotels, railway stations, and a dozen other places. You will remember in that printed extract at the beginning of this paper there is an intimation that making automobiles is a side issue. Now keep that in mind while we go on.

In such a great establishment, with complicated and expensive machinery, it is almost an impossibility to prevent injury entirely; and I was greatly pleased—in fact, I felt like thanking God when I was

ushered into a large spacious room beautifully lighted, and kept scrupulously clean, where were half a dozen physicians and surgeons provided with every up-to-date appliance for caring for sick or injured people. While we were there two men came in, each one having a mangled or cut finger. The workman loses no time when he is accidentally hurt in this way, and he pays no fee to the doctor. I have not time here to tell you all they do for the physical comfort and for "safety first," as has been so often expressed.

Now hold your breath while I tell you something else. They have in that great establishment men from all parts of the world, and, if I make no mistake, the guide said that at least *one hundred different languages* are spoken here, and they often come to work with no other language than their own. How can you teach men to work with dangerous machinery if you cannot talk to them? To remedy this handicap they have an English school, and this school is going on all the while. Pay-day is going on all the while; and as they work in eight-hour shifts a great part of the factory is going on day and night. By the way, a great and wonderful new factory is now in process of construction to give place to *other thousands* besides the 30,000 already enrolled. Well, that English school pleased me about as much as any other one thing. The teacher was one of the crowd. He had on his overalls like the rest. While we were there he gave them a sentence to repeat after him, and I think it was this:

"The Ford Motor Co. have in their employ 30,000 people." He spoke slowly and distinctly, the most of his audience also speaking slowly and distinctly, and managed to follow him pretty well. The word "employ" seemed to be hard for their tongues, or at least some of them, and he said it very slowly many times over. Then, pointing to a certain person, he said, "I want you, my good friend, to speak that word *employ* all alone;" and after he had made him utter it fairly well he had the whole crowd follow. Now, this teacher had a special gift for teaching his fellow-men. His gesticulations and shouts and comical grimaces made me think of Billy Sunday. Oh what a glorious undertaking is the one I have just mentioned, to take an average crowd of foreigners coming from all parts of the world, and teach them a common language, including old men! My good father used to remark humorously, especially when he was getting old, "It is a hard matter to teach old dogs new tricks." Well, I begin to realize it just now, espe-

cially when my grandson is trying to teach me to run a Ford automobile.

Now, here is one other thing that pleased me greatly. We went into one room 800 feet long and perhaps 200 feet wide; and the piles of machinery, belts, and wires, made it look like the tangled forest up around that "cabin in the woods." Well, amid all this machinery were human beings so thick they made me think of bees at the front of a hive on a mid-summer day. Why, there were just clusters of men and boys so close together you would not think they could work. But they did work with such a vim that I asked if they were employed by the piece. I was told there was no piece-work in the whole establishment. My informant said that, while there were some good things about the piece system, it was so liable to start jealousy and ill feeling they had decided against it. I told him it was much the same way in our establishment of between 200 and 300 hands. Well, now, I made a little inspection of those boys and men crowded like bees in a hive. Come to look carefully, each man did one particular thing. For instance, one part of the automobiles that was being put together was located on a long stand or table, and this was pulled along slowly by means of an endless chain. As it passed, each man did something to it. For instance, one man had a box of burrs. These he put in place and turned them down hard and screwed each burr tight with an appropriate little wrench. The next added something else; and it was all so timed and managed that all were kept busy and nobody had to wait. In fact, they had to hustle sometimes to get their part finished before the machine had passed and the next one had come along. Now, you might think it would be monotonous to do the same thing over and over hour after hour and day after day. But to my surprise each man looked well and happy. Right here a great lesson comes in. These workmen are happy, and *do* enjoy their work. The things I have been telling you about, the looking after his health and comfort, is the secret. Added to it all, the institution is now "profit-sharing." Each person is a part of the institution. If it prospers, *he* prospers. If I remember correctly, they have, at least some of the time, been enabled to turn out a finished machine for very minute of the day and night.

By the way, the appliances to obviate the necessity of heavy and tiresome lifting are a wonderful feature of the institution. One of their workshops is six stories high; and away up under the roof is a traveling crane that moves the whole length (I think 800

feet) of the big room. Under this is a second traveling crane that runs back and forth at right angles; and then there are grappling-hooks that will go down to any story and pick up a load and deposit it where wanted. This system of mechanism picks up every box of materials and lays it down right where the workmen want it. In this way the workman is spared fatiguing work that has formerly been supposed to be unavoidable all over the world. A good many of the materials slide down on an inclined plane just where they are wanted. For instance, at one point the rubber wheels came down and were slipped on to the machine. Then it was pushed along until it came on to some revolving rollers in the floor. This set the wheels revolving, which cranks the machine so the engine can be tested. If everything went all right, a boy hopped on to the chassis, or the auto without a top, and ran it under a certain platform. When he got to the right spot he hopped off and the top was let down by this traveling crane, and dropped into place so quickly and surely that it almost seemed like sleight-of-hand. I said to my guide, "Why, Mr. McKay, the stories in the Arabian Nights are nowhere compared with what we see going on in this department." I asked him if it was possible for the men to get along without jealousy, bickering, or fault-finding, or things of that kind, that are so common. He said the secret of it was they tried to cultivate such relations between employer and employee that they were all loyal to the institution.

By the way, if this Home paper should be the means of inducing everybody to try to go to work for Ford, let me tell you there are ever so many thousands of applicants waiting for a place all the while. In regard to intemperance, there is very little of it, because it is understood that a man necessarily loses all chance of promotion and also *his place* if he comes to work showing any symptoms of booze. Our readers already know what Ford has done to discourage the use of cigarettes. In fact, this Ford institution is to me another reminder of what I have so often been telling you of late, that "God's kingdom is coming;" and it is coming thru means that have been brought to bear thru our great business centers and the factories as well as thru our churches and religious organizations. Whatever may be said of Ford's theological views, he certainly loves his fellow-men; and his great work, therefore, is along the line of our beautiful text that "God so loved the world."

Just a word about our second text. So



far as I have learned, Mr. Ford is not a member of any church. I hope I am mistaken about this; but the general impression seems to be that he is not connected with any body of Christian people. And yet we find him doing a reform work among people of every nation of the world that perhaps has never before been paralleled. He loves his fellow-men. He has been all his life untiring in striving to educate and uplift them. In connection with that great enterprise he has sent doctors and trained nurses into the homes of his workmen; he has taught the mothers how to care better for their children; he has looked after their sanitary surroundings, and in short he has been doing a sort of missionary work perhaps never before undertaken by any man in any organization. What shall we say? The verses I have given from that 9th chapter of Luke seem to me to hit the matter exactly. There are many strange things in this world of ours. Altho Mr. Ford may not be a follower of the Lord Jesus Christ, he has never, so far as I know, spoken against him; and the Master said, as I understand it, "Forbid him not;" and, again, "He that is not against us is on our part." My opinion is that Mr. Ford has been and is even now laying up *treasures in heaven as well as here on earth*, and perhaps he does not know it. Again, I am reminded of the passage where the people say, "Lord, when say we thee a hungered, or athirst, or a stranger, or naked, or sick, or in prison, and ministered unto thee?" The answer was, as you may recall, "Verily, I say unto you, Inasmuch as ye have done it unto one of the least of these my brethren ye have done it unto me."

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HAVING SUNDAY ON SATURDAY; SOMETHING ABOUT TEMPERANCE WORK.

On page 337 of our issue for May 1 I suggested some reasons why people all over the world could not have the days of the week at the same period of time wherever they were; and in reply to what I said, a good lady writes as follows:

We take GLEANINGS and enjoy it very much; also our bees. I read every word of your paper, especially *Our Homes*, etc. I notice you often write under the heading, "God's Kingdom Coming." It is coming, but not in the way many think.

My dear sir, you place yourself in the class spoken of in Ezekiel 34, when you give nearly a column of your bee journal as to which day is Sunday. If you will go to a standard cyclopedia you can get the origin of Sunday. Seventh-day Adventists do not try to have Sunday on Saturday. Your argument is very old. I am an old woman, and I have heard it before; but it is not as old as *God's law* given at

creation, reiterated at Sinai, and kept by Christ and his apostles for nearly 400 years.

I have been blessed by obeying God rather than man-made laws regarding Sunday, and I am not alone. God is calling out a little flock, without spot or wrinkle, to receive him at his coming. It is my greatest desire to be one of that little company. If I were where the day of the week was disputed I would keep the day *before the one decided upon* as Sunday by the majority—always the sixth day from Sunday.

The *Temperance Annual*, gotten out by the Seventh-day Adventists, publishers, got the credit for saving Maine at the last election. Thousands of these are used by all classes of temperance workers. I send you a copy, also copies of other papers at hand, that you may see Seventh-day Adventists are trying to do their share in temperance work. I have marked the margin at the top of each copy, that it may save your time. I enjoy your talks on simple living, for Seventh-day Adventists lead the simple life.

Do you know that the renowned D. L. Moody accepted God's law regarding the sabbath at the last?

May God help you is the prayer of an humble reader. MRS. B. L. PERRY.

Nevis, Minn., May 18.

In the article referred to, I said I had had but one reply to my suggestion that we call Monday the first day of the week so as to get rid of the inconvenience of having different days for Sunday. The good lady who writes the above gives us a little more light on the subject if I understand it. She says wherever there is a dispute as to which day should be Sunday, *she* would keep the *day before* the day agreed on by the majority.\* At first I was inclined to think this indicated a contrary spirit, or a disposition to disagree or stand out against what the majority might agree on; but in praying for a little more charity for a lot of good people, I was led to look at it in this way: These people may honestly believe that God calls on them, and perhaps all of us, to remember and respect (as a day of rest) what is ordinarily called the seventh day instead of what pretty nearly the whole wide world calls Sunday. Let me remark right here that near our Florida home one bright Sunday morning, when everybody was on the way to church, I saw one neighbor who was painting his fence fronting the street. As he was a new comer the question came up, "Is this man particularly anxious that everybody may know that he has no

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\* I hope our Advent friends will not feel hurt when I say that since the above was in print I saw an account somewhere of a certain Scotchman who was always pulling against the good people of his church. On one occasion a strong effort was made to have a particular motion declared unanimous, but the Scotchman stood out as usual; and then they tried to have him unite with the rest so that they might go on with their work. But he became so stirred up that he arose and said, "Brethren, I want you to understand that, so long as I am a member of this church, there is never going to be *anything* 'unanimous.'"

respect for Sunday and for Christian people, or does he wish by this act to let everybody know that *he* is a Seventh-day Adventist? I shall have to confess that I did not take pains to inquire whether he was an Adventist or not; but I cannot help thinking that his act was not only unwise, but for a stranger just coming into the neighborhood, it was also unchristianlike.

And now I want to say a good word for the Adventists. This good lady has sent me a copy of the *Youth's Instructor* for 1916.\* I called attention to this annual about a year ago, and want to say again that I think it is about the best and most finely gotten-up *temperance periodical* I ever saw. The first article, with beautiful illustrations, is by former Governor J. Frank Hanly, of Indiana; and it is well worth the price of the magazine. I have heard Mr. Hanly make several addresses, and I have had some good talks with him; and my opinion of him is that he is one of the wisest and most level-headed temperance and Christian workers we have in the whole wide world. In a wet-and-dry contest I cannot think of any better literature to distribute than this *Youth's Instructor Temperance Annual*. It can be had as below:

THE YOUTH'S INSTRUCTOR, Review and Herald Publishing Association, Takoma Park Station, Washington, D. C.

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THE FLORIDA EVERGLADES; A BRIEF TRIP THRU A PART OF IT BY OUR OLD FRIEND, W. C. GAULT.

Mr. Root:—Nettie and I took a trip down thru the southern part of the state in April. We went by rail to Ft. Myers, thence up the river to Labelle, thence motored across thru a wild part 21 miles to where we could again get a boat. We stopped at Moore's Haven in the Everglades—a lovely spot. Moore is a Chicago man, and owns 100,000 acres of this rich land, and is getting things fixed up to suit him. I suppose he has plenty of money in the bank and some in the pocket. I didn't feel sorry for him, but I *did* pity the poor fellow that had invested in ten acres with no money, either in the bank or pocket, and could not sell a vegetable. We went from there to Rita Island in Lake Okechobee, and from there to one of those big drain canals which lead to the east coast at Ft. Lauderdale. It was a wild-looking place thru that sawgrass—very few birds or animals, but lots of alligators. The grass was very dry when we were there, and we saw some large fires. In one place the fire was heading toward the canal. A poor little rabbit out of breath jumped right into the canal to get rid of the fire. In another place we saw a wildcat that seemed to hesitate about going in the water, and climbed up a small bush that was green and sat there, not knowing what to do next. We were going ten miles an hour, and soon left him. The canal is 60 feet wide and 61 miles to the head waters of New River, where there is a pair of locks. We stayed over Sunday at Ft. Lauderdale, then came up the east coast to Palm-

Beach. I wasn't struck with the place—no conveniences, and a certain air of "all of self and none of thee."

I didn't see a place in all the route for which I would like to exchange our quiet little home in this lovely sunshine city. We saw some wonderfully rich land in those Everglades, but I felt that the other fellow might have it and I would stay where we had some privileges—neighbors and friends. I think that some time that country will be drained and cultivated, but it will take time and lots of money, and the fertility will have to be kept up. I have had some experience with muck land. We didn't see a trolley car from the time we left Tampa till we got back there, and didn't hear the toot of a locomotive from the time we left Fort Myers till we reached Ft. Lauderdale—48 hours.

The tourists have about all left, and some of them from Ohio write of the cold wet season. We are having lovely weather and lots of nice ripe melons and peaches. We have a few nice hens, and they continue to pay tribute. All of the good things are not in Florida, but there are a good many, and one must stay thru the summer in order to enjoy them.

St. Petersburg, Fla., June 12. W. C. GAULT.

The above was evidently not intended for print; but there are several points in it that many will be interested in. Think of one man owning *one hundred thousand* acres. Well, if this friend has money enough to open up and develop that new region, his work may prove to be a blessing to humanity. Just a word of explanation about the poor fellow who had only ten acres and no money, etc. I take it the reason he could not sell his vegetables was because he was so far away from the market or shipping-point; and this is a mistake that has been made several times in Florida. Unless your grove or truck-garden is convenient of access to some shipping-point or town or city, it may cost more for transportation than the crop amounts to, especially where the stuff has to be hauled thru deep sandy roads. The new hard roads that are now being built all over Florida are going far to help this state of affairs. The same trouble has been experienced to some extent by beekeepers, who, after having secured an abundant crop of honey, have found it not only difficult but expensive to get it to a railroad station or boat-landing.

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"CHARITY SUFFERETH LONG, AND IS KIND."

On page 503, June 15, in speaking of the dispute in a Pullman car, I had something to say about Christian courtesy; and I have often wondered why people, in using the telephone, so frequently become not only impatient but uncivil. You may ask the question right here, "Mr. Root, are we to understand that *you* are always gentle and kind when you use the telephone?"

To which I answer that, on account of my deafness. I seldom try to use the telephone; but I am often obliged to listen to

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\* If you regard this paper of real worth as a temperance agitator and educator, send at least one dollar for twenty-five copies to give to others. Twenty-five cents will bring you five copies.



others, and sometimes I venture a remonstrance against hasty words. Now, here is something from our good old friend the *Sunday School Times* which hits the matter to a dot. Read it, and see if it hits you, my good friends.

#### ANSWERING THE TELEPHONE.

To rebuff a visitor is neither courteous nor Christian. Most of us pride ourselves on the fact that we would not do such a thing. Yet telephone discourtesy is one of the commonest and one of the strangest events in the everyday life of both Christians and other ordinarily courteous folks. Stop and think a moment; with what tone of voice do you answer the telephone if the bell rings at a moment when you would rather not be interrupted? An amazingly large proportion of well-bred and well-mannered Christian people make their first word of reply to the phone call in a tone either of noticeable impatience or of curtness or of weariness. Let those same persons be addressed by a friend entering the room unexpectedly, and they would not think of greeting him in any way except that of courteous, inviting welcome, even if they did not feel "welcoming" inside. Yet over the telephone they abandon that tone and spirit whenever they feel like it, and they do not realize what a sharp rebuff it means to the unknown caller at the other end of the wire. The simple test is this: do we answer the telephone exactly as we greet our friends face to face? If not, let us be properly ashamed of ourselves, and never fail that way again.

While making the above clipping from the *Times* I found something right below it which it seems to me must have a place. A good many times in this busy life of mine when I have worked hard to accomplish

something—yes, may be I have worked for months and years, and, after it was done, instead of giving me credit the great busy world gave credit to somebody else. I used to feel hurt at such times, and perhaps got a little sour toward the world. But I believe I have mostly gotten over it. Now below is that second item from the *Times*:

#### WHOSE RECOGNITION?

Can we be happy when we are ignored? Not if our chief happiness comes from our interest in self. But if that is our idea of happiness, we are satisfied with a poor counterfeit of the real thing. We have yet to know the meaning of the joy that is centered, not in what we are, but in what Christ is. Joy for the first time begins in any one's life when Christ has become the whole in his actual life and being. Charles E. Scott, of China, punctures a common failing when he says: "When one is in Christ, how silly and inordinate it is to waste any time or strength in trying to get 'recognized.' And what joy it is to try to get Christ recognized! My experience is that, the closer I live to him, the more it is a matter of indifference whether I personally get credit from fellow-workers for things accomplished or not." To be in Christ is to be dead to self. So the struggle for self's recognition ceases after our burial with him into death, that in all things he may have the pre-eminence.

In answer to the question, "Can we be happy when thus overlooked?" yes, we can even "rejoice and be glad" because an opportunity is afforded us to show forth a Christlike spirit. Charity, you will remember, not only "beareth all things," but "seeketh not her own."

## HIGH-PRESSURE GARDENING

SWEET CORN FOR POULTRY; SWEET CLOVER SPORTING; HIGH YIELD OF POTATOES.

Mr. Root:—On page 562 you have an item on sweet potatoes and peas preventing hens from laying. I have often heard that sweet corn would stop hens from laying, but have fed my White Wyandottes Golden Bantam almost exclusively for months at a time, and they laid well, and found also that they preferred it greatly to common Dent corn, as they would pick out all the Bantam and leave the Dent on the ground.

You mention a period between old and new potatoes. I usually have old Carman No. 3 away after new potatoes, in a common cellar, in fine condition even up to September 15 one year. We eat them "skins and all."

Last summer I told you of a remarkable plant of sweet clover, and promised you seed. It grew over seven feet tall from seed planted April 15, with large thick leaves ten times as large as the common; but it was an annual variety, or annual sport, and died, dead as a ragweed. I picked off its few attempts at blossoming, or it might have seeded, and proved of value; but I fear frost would have killed it before doing so. It is odd, too, that its root was very small as compared with common sweet-clover plants of the same age. I am certain some plants with much smaller amount of stems and foliage had roots ten times as large. I regret its loss.

I planted seed of sweet clover taken fresh from plants last August, and they are now over six feet

tall, and blossoming. Alfalfa planted at the same time is only about two feet high—in blossom too.

Mr. Baldwin's thoughts on different names for the same plants are interesting. I came from Sidney, Ohio, in June, 1907, and have found names of plants here in many cases different from Ohio. I wrote you once about poke of Ohio being called skoke here, while poke is a swamp plant which grows in company with skunk cabbage, and is said to be poisonous. What we know in Ohio as lamb's-quarter is here called pigweed, but is used for greens. Dogfennel is here called Mayweed; timothy is herd's-grass; sycamore-trees are buttonball. I have heard them called buttonwood in Ohio.

We have a potato here known locally as Double Yelder, deemed by many as superior to any other in quality. It is good at digging-time. Last fall I found one hill with 35 potatoes, which I saved carefully to plant this spring. On examining this spring one was scabby, and discarded. The remaining 34 weighed 54 ounces at planting time; 23 were planted whole, and 11 cut to two pieces, planting 45 hills. I like undersized potatoes for baking or boiling, for eating "skins and all." By selecting those hills containing the largest number of potatoes when digging I have reduced the size of my strain of Carman No. 2, while increasing the number in the hill.

Packer, Ct., July 5.

E. P. ROBINSON.

Friend R., I am glad to know that sweet corn is preferred by poultry. I feel sure it must be more nourishing, and I could hard-

ly believe it would prevent laying. I very much regret your loss of the "sport" sweet-clover plant. So far there seems to have been but little attention paid to improving varieties of sweet clover. I believe it is true that the Carman No. 3 potato has the remarkable property of keeping in good condition when most other potatoes are unfit to use. I suppose, of course, you keep the sprouts rubbed off. Where potatoes of any variety are inclined to grow too large, this can be corrected by planting close together. In order to get potatoes extra early, down in Florida we plant good-sized tubers, and plant them whole. So many stems come up that this has the effect of growing a large number of small potatoes. These small potatoes are just right to cook whole with green peas.

FREEMAN POTATOES; ALSO A KIND WORD  
FROM AN OLD FLORIDA FRIEND.

My good friend who writes below applied to me for some Freeman potatoes; but I was unable to find them at so late a date as the last of June. The letter below explains itself:

*Mr. Root:*—Your very kind letter of June 30 and the letter of previous date in regard to Freeman potatoes was duly received, and your efforts, I assure you, are very much appreciated. I had no intention of putting you to so much trouble in the matter; but I did want that particular variety of potato, and had the impression that it could be obtained in Medina. I agree with you that so good a tuber should be preserved. I regret to learn that Mr. Green has passed on, of which I was unaware until the receipt of your letter.

As Maule, of Philadelphia, advertises them in his catalog, I infer he usually carries a supply early in the season, so don't make any further special effort to find them. My conscience troubled me a bit when I first wrote your company for fear the request would be referred to you personally, for I am fully aware of what a busy life you still lead and the many demands upon you.

I read all that you write in *GLEANINGS*, and am greatly interested in your Florida experiments in different lines. I think you are prolonging your life and usefulness by spending the winters in that state. My chief regret is that you did not select the southeast coast, where my permanent home is, tho I bought a little place here in Rye for a summer home, and have some fruit-trees. I make a vegetable garden and keep a few hens. I had a cow last summer, but find it less work and more economical to buy milk, butter, and cream since I am here only half of the year.

Rye, N. H., July 8.

WALLACE R. MOSES.

The Freeman is not only quite early, but for quality I think it is equal to any. Our good friend Moses, who writes the letter above, has a northern home several miles from any express office, and wants his potatoes by mail—something like our old cabin in the woods, as I take it.

SUNFLOWERS FOR BEES, AND SOME OTHER THINGS.

The following letter explains itself:

Inclosed is an article on sunflower that I intended sending long ago. I am sure I read in *GLEANINGS* some time last year that very little honey is obtained from the cultivated sunflower. Now, this is our main honey crop, and nice honey too. Is that another case of locality, or is it on account of the vast acreage? Seed is used for making salad oil.

Manteca, Cal.

ERNEST E. WARREN.

MANTECA SHIPPED LARGER SEED CROP THAN U. S. IN 1909; E. POWERS SOLD 1275 TONS OF SUNFLOWER SEED THIS YEAR; WHOLE CROP OF UNITED STATES IN 1909 WAS 1117 TONS ACCORDING TO U. S. REPORT, WORTH \$76,000 AT 3 CENTS PER POUND.

E. Powers has shipped 1275 tons of sunflower seed this season. The largest shipment of previous years has been 215 tons. But preparations were made to handle 600 tons this season, while the actual output more than doubled the expectations.

In 1909 California produced 120 tons of sunflower seed, and the output for the whole United States, as given by the year-book of the Department of Agriculture for the year 1909 was 1117 tons, or 158 tons less than the Manteca section produced this year.

When reduced to a matter of dollars and cents, figured at 3 cents per pound, the sunflower crop of the Manteca section amounted to \$76,500. Mr. Powers paid out over \$60,000 to sunflower-seed and grape-growers during the month of October.

My good friend, wherever sunflowers, mustard, or any other crop is grown largely, as in the case you mention above, by all means locate an apiary near by. A few days ago a subscriber asked the best kind of mustard to plant, especially for bees. I told him it would not pay him to plant mustard nor anything else exclusively for honey; but wherever there are large fields or special localities devoted to growing such things as sunflowers, mustard, etc., for the general market, there is the place for the wideawake beekeeper to start an apiary. I am glad to know that the large amount of oil in sunflower seed is being appropriated as an article of food.

THAT "POT OF GOLD," AND WHERE TO FIND IT.

The following is clipped from the opening article in *Good Health* for July:

Somewhere in summer is health. It will not come to you unbidden. You must search for it in the great outdoors.

You will find it in your garden—at the business end of a hoe handle.

Do not spend time and money at summer resorts that will only disappoint you. The pot of gold does not lie at the other end of the rainbow, but at this end, in your garden.

I wish to put in a good emphatic amen after the closing sentence.

The pot of gold is right near by; and it is in your garden or back yard. If you do not find the gold you can most assuredly find health, and this is of infinitely more value than gold.



# TEMPERANCE

HAVING IMPORTANT OFFICES FILLED BY GOOD MEN; IMPORTANCE OF THE PRIMARIES.

Perhaps one of the greatest troubles that beset us as a nation is the fact that bad men *keep* getting into important offices. The temperance people sometimes take it for granted that a man is on the dry side and not only vote for him but work for him, only to discover later that they have been humbugged. Just now, here in Ohio, and I presume in other states as well, people are wanting you to vote for them. As a rule, I personally do not believe very much in voting for any man who goes about soliciting votes. Before I vote for any man I want to know something about his past record: and on the wet-and-dry question, unless a man can come right out before the people and declare, without fear or favor, that he is on the dry side, I would have nothing to do with him. The *Rural New-Yorker* says when a man tells you or writes you that he "will take the matter into consideration," turn him down. This, of course, refers principally to the temperance question. The time when such moral questions need "consideration" has gone by. That is our greatest trouble—apathy and indifference. The *American Issue* gives the figures to show what a shameful per cent of professing Christians and church members forget or ignore the importance of the primaries. As a consequence, when election time comes they are more or less helpless. The liquor party, on the other hand, are on the alert, and fully alive to the importance of being on hand *all* the time. As a result, when we come to count our votes after election there is a widespread consternation to understand how it is that there are so few *good* people and so many *bad* people. It isn't true that the bad outnumber the good, but it *is* true that an alarming part of our good and intelligent people get stupid and indifferent when they ought to be wideawake and doing their best at the primaries to head off the one who, "as a roaring lion, walketh about, seeking whom he may devour."

August 8 is primary day in Ohio.

THE SAD CASE OF SEATTLE, WASH.: ITS "DEPLORABLE CONDITION" UNDER THE DRY REGIME.

Mr. E. H. Sargent, a Medina boy who for several seasons had charge of our apirary, and who is now a prominent man at Fort Casey, Wash., has just mailed us a copy of the Sunday edition of the Seattle

*Times* (28 pages), largely taken up by telling of the blessing which has come to Seattle since it has been voted dry. You may have seen notices in various periodicals (that is, periodicals that accept such notices, even on their advertising pages) of the "deplorable results of prohibition in the great Northwest," "miles of empty stores," etc. Well, now, this editor of the Seattle *Times* was a wet man, and the *Times* was a wet paper. But it is almost laughable to see him turn around and own up that he was wrong. We have space for only a few of the headings found on the first page.

SIX MONTHS UNDER DRY LAW PROVES FALSITY OF LIQUOR MEN'S CHARGES.

SUICIDES AND MURDERS DECREASED BY HALF SINCE JANUARY 1; POLICE ARRESTS DUE TO LIQUOR VIRTUALLY CUT IN TWO, AND BUSINESS MEN REPORT TRADE GAINS.

Well, we've had six months of prohibition, and I can't find those miles of empty stores.

On page 16 I find the following:

The *Times* admits it was wrong when it said during the campaign against prohibition that the enforcement of the statute would mean miles of empty stores in Seattle, reduced bank clearings, reduced bank deposits, reduced rentals, reduced realty values, and general business depression. Six months ago the law went into effect. *None of the dire things prophesied for the first half of the year 1916 has occurred. On the contrary, Seattle has prospered wonderfully.*

May God grant that more editors will find themselves mistaken, and have the grace and Christian courtesy to *acknowledge* they were mistaken, as has the editor in the above.

BREWERS ADVERTISING FOR THE NAMES OF BOYS, ETC.

On page 422 I copied a letter from the Hollister Distilling Co. But the *Manatee River Journal*, published at Bradentown, Fla., "goes one better" on the advertisement I gave. Here is the way they tell it:

The following notice tells what's wanted by the saloon:

WANTED.—One hundred boys for new customers. Most of our old customers are rapidly dropping out. Ten committed suicide last week. Twenty are in jail, and eight are in the chain gang. Fifteen were sent to the poorhouse. One was hanged. Three were sent to the insane-asylum. Most of the rest are not worth fooling with—they've got no money. We are just obliged to have new customers—fresh young blood—or we'll have to shut up shop. Don't make any difference whose boy you are, we need you. You will be welcome. If you once get started with us we guarantee to hold you. Our goods are sure. Come early—stay late. Opelika Saloons, Proprietors.

# Better Queens and Bees for Less Money

20 years of select breeding gives us bees and queens of highest quality---Queens for Honey production---Queens of unusual vitality---Queens that successfully resist European foul brood

Our select colonies for breeding purposes, larvæ, and select drones are those of the highest standard, the choice of over 1000 hustling honey-producing colonies of pure Italian bees. These select colonies are located at such a distance from all other bees as to assure pure mating, and thus effective use of our select drones. The larva we use in grafting is as small as can be seen and handled, having just come out of the egg. These are placed in cells, which in turn are placed and nourished in strong ten-frame colonies, which, when honey is not coming in sufficiently, are heavily stimulated by feeding. Thus we get large well nourished cells, which in turn produce large, long-lived, and hardy queens that give workers unexcelled for honey production. We use no baby nuclei. All our queens are hatched and reared in strong three and five frame full-dph hives. Thus natural conditions are preserved, and the best queens produced.

## Price List of Our Three-banded and Golden Italian Queens. Ready by Return Mail.

Untested. . . . . 50 cts. each or \$45.00 per 100	Tested. . . . . \$1.00 each or \$ 90.00 per 100
Select Untested. . . . . 65 cts. each or 60.00 per 100	Select Untested. . . \$1.25 each or 115.00 per 100

All queens are warranted purely mated. Wings clipped free of charge.

## Price List of Our Swarms of Bees for Fall Increase.

1-lb. swarms with select queens. . . . . \$1.75	2-lb. swarms with select queens. . . . . \$2.50
3-lb. swarms with select queens. . . . . 3.50	5-lb. swarms with select queens. . . . . 5.00

All orders filled at once or as desired.

We have no disease of any kind. Satisfaction we always guarantee.

M. C. Berry & Company . . . . . Hayneville, Alabama

## Italian Queens

with a Record of 30 Years

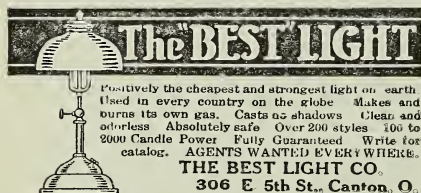
Leininger's strain of Italian bees and queens have been carefully bred for 30 years; for gentleness and honey-gathering qualities are unexcelled; 95 per cent pure mating guaranteed. Queens ready June 1. Untested, each, \$1.00; 6, \$5.00; tested, \$1.50; 6, \$8.00.

Fred S. Leininger & Son, . Delphos, Ohio

## DOOLITTLE & CLARK

Italian queens are what you want for fall requeening. Try them! Prices: \$1.00 each; \$7 for six; \$9 per dozen.

Marietta, New York



**The BEST LIGHT**

Positively the cheapest and strongest light on earth. Used in every country on the globe. Makes and burns its own gas. Casts no shadows. Clean and odorless. Absolutely safe. Over 200 styles. 100 to 3000 Candle Power. Fully Guaranteed. Write for catalog.

**AGENTS WANTED EVERYWHERE.**

**THE BEST LIGHT CO.**  
306 E 5th St., Canton, O.



**4 MONTHS FOR 10¢**  
Trial Subscription To Fruit and Garden Paper  
Tells about planting, pruning, spraying and selling fruit and garden truck.

## Ask Us Your Hard Questions.

We conduct this department for the special benefit of our subscribers. Experts answer all questions by mail and through the columns of the magazine.  
Fruitman and Gardener, 106 Main St., Mt. Vernon, Ia.

## QUEENS AT 50c

These queens are guaranteed to be as good as money can buy. They are bred by the same and with the care as the high-priced ones. They are bred from imported mothers, the best in the world, and will produce bees that are the best for honey-gathering, gentleness, and not inclined to swarm.

	1	6	12	25	50	100
Warranted . . . . .	50	3.00	6.00	11.75	22.50	43.75
Select untested . . . . .	65	3.50	6.75	12.50		
Tested . . . . .	1.00	5.50	10.00			
Select tested . . . . .	1.50	8.50	16.00			

We guarantee that all queens will reach you in good condition, to be purely mated, and to give perfect satisfaction.

All orders filled at once.

L. L. FOREHAND, Fort Deposit, Ala.

## Italian Queens---Northern Bred

make extra hardy queens for Canada and Northern States. I reduce price on untested August and September, 75 cts. each; \$8.00 per dozen. Select tested, \$1.50. Write for prices on larger numbers and get my price list in full. Plans "How to Introduce Queens," and "Increase," 25 cts.

E. E. MOTT, . . . . . Glenwood, Michigan

## ITALIAN QUEENS

Untested remainder of the season 75 cts. each; \$4.25 for six; \$8.00 for 12. Tested, \$1.00 each in any quantity. Satisfaction in all cases or money refunded. Been breeding queens for sale for 25 years, and we know how.

L. H. Robey, Worthington, W. Va.



## Classified Advertisements

Notices will be inserted in these classified columns for 25 cts. per line. Advertisements intended for this department cannot be less than two lines, and should not exceed five lines, and you must say you want your advertisement in the classified columns or we will not be responsible for errors.

### HONEY AND WAX FOR SALE

FOR SALE.—Clover extracted honey.  
F. W. MORGAN, Zumbro Falls, Minn.

NEW ORANGE-BLOSSOM HONEY.—Two 60-lb. cans, \$9.75. Sample bottle by mail, 10 cts.  
OTTO LUDENDORFF, Visalia, Cal.

Clover honey, extracted, in 60-lb. cans; comb in 4¼ x 1¼ sections. Write for prices, etc.  
E. L. LANE, Trumansburg, N. Y.

FOR SALE.—Choice comb and extracted honey; also about 90 colonies bees with all fixtures.  
J. G. CRISLER, Walton, Ky.

Choice new-crop white-clover extracted honey in new 60-lb. tin cans, the bargain of the season; sample, 10 cts. D. R. TOWNSEND, Northstar, Mich.

FOR SALE.—Clover honey (1916 crop), excellent quality, in new 60-lb. cans; also 5-lb. and 10-lb. pails. Sample, 10 cts. May be deducted from first order.  
DODDS' APIARY, Cambridge, N. Y.

FOR SALE.—A1 sweet-clover honey in 60-lb. cans, two cans to a case, 7 cts. per lb.; also comb honey in 4¼ x 1½-inch sections, f. o. b. cars.  
JOE C. WEAVER, Cochrane, Ala.

FOR SALE.—Raspberry, basswood, No. 1 white comb, \$3.00 per case; fancy, \$3.25; 24 Danz. sections to case; extracted, 120-lb. cases, 9 cts. per lb.  
W. A. LATSHAW CO., Clarion, Mich.

New clover honey; comb runs from No. 1 to fancy, \$3.50 per case; No. 2, \$3.00 per case of 24 sections, six cases to carrier; extracted clover, 9 cts., two 60-lb. cans to case.  
H. G. QUIRIN, Bellevue, O.

Saw palmetto honey, thick and delicate; case of two 60-lb. cans, \$5.00. Also best seagrape and mangrove honey, 7 cts. in cans or 6 cts. by the bbl. Sample, 10 cts., to be applied on order.  
A. E. AULT, Bradentown, Fla.

RASPBERRY HONEY.—Thick, rich, and delicious, put up for sale in 60-lb. tin cans. Price \$6.00 a can. Sample by mail for 10 cts., which may be applied on any order sent for honey. Write for price on large lots.  
ELMER HUTCHINSON,  
Rt. 2, Lake City, Mich.

FOR SALE.—Beautiful white-clover extracted honey, left upon the hives until after the close of the season before extracting, then put up in new 60-lb. net tin cans. The fact is, we have studied out a system of extracted-honey production whereby exquisite quality is secured at the expense of quantity. Just a little more money will buy this rich, ripe, well-ripened stock than is required to buy "just ordinary" stock. Inclose 10 cts. in stamps for a large sample that costs us 25 cts. to send, and be convinced of the superior quality of this stock. Address the BEEKEEPERS' REVIEW, Northstar, Mich.

### HONEY AND WAX WANTED

Beeswax bought and sold. STROHMEYER & ARPE Co., 139 Franklin St., New York City.

WANTED.—Comb and extracted honey, in car lots and less carlots. J. E. HARRIS, Morristown, Tenn.

WANTED.—Comb honey; fancy and No. 1 qualities; 4¼ square by 1½ sections preferred. Also white extracted honey, carload or less; quality.  
HOFFMAN & HAUCK, Richmond Hill, N. Y.

BEEWAX WANTED.—Until further notice I will pay for good yellow wax 28 cts. cash or 30 cts. in trade for queens delivered here.

W. D. SELLERS, 242 Pine St., Lancaster, Pa.

WANTED.—Your own beeswax worked into "Weed Process" foundation at reasonable prices.

SUPERIOR HONEY CO., Ogden, Utah.  
"Everything in bee supplies."

### FOR SALE

FOR SALE.—A full line of Root's goods at Root's prices.  
A. L. HEALY, Mayaguez, Porto Rico.

HONEY LABELS.—Most attractive designs. Catalog free. EASTERN LABEL CO., Clintonville, Ct.

SEND TODAY for samples of latest Honey Labels. LIBERTY PUB. CO., Sta. D, box 4-E, Cleveland, Ohio.

FOR SALE.—165-lb. honey-kegs at 55 cts., f. o. b. factory.  
N. L. STEVENS, Venice Center, N. Y.

Get our new Rubber Stamp Catalog.  
ACME PRINTING CO., Medina, Ohio.

Beekeepers, let us send you our catalog of hives, smokers, foundation, veils, etc. They are nice and cheap.  
WHITE MFG. CO., Greenville, Tex.

FOR SALE.—Cedar or pine dovetailed hives, also full line of supplies, including Dadant's foundation. Write for catalog. A. E. BURDICK, Sunnyside, Wash.

The Stanley improved cylinder cage with queen-cells, postpaid, 6 cts. each, or \$5.00 per 100. Write me for queen-breeders' supplies. ARTHUR STANLEY, 1907 Washington Blvd., Chicago, Ill.

FOR SALE.—Medium-brood foundation. 1 to 10 lbs., 52 cts. per lb. Up to 25 lbs., 50 cts. Up to 50 lbs., 48 cts.; 100 lbs., 48 cts. prepaid in La. Root's goods for sale. Beeswax wanted; 25 cts. cash, 26 trade. J. F. ARCHDEKIN, Bordolville, La.

THE ROOT CANADIAN HOUSE, 185 Wright Ave., Toronto, Ont., successors to the Chas. E. Hopper Co. Full line of Root's goods; also made-in-Canada goods. Extractors and engines; GLEANINGS and other bee-journals; Prairie State incubators. Get the best. Catalog and price list free.

WINTER PROTECTION.—When division-boards are put in supers at sides next brood-nest and bees seal up all cracks—thus creating double-walled dead-air chambers on all six sides of brood-nest—result is bees in our hive are in better condition in spring than those of any colonies in ordinary hives.

WM. F. MCCREADY, box 1, Estero, Lee Co., Fla.

### WANTS AND EXCHANGES

WANTED.—Two-frame honey-extractor; give description and price in first letter.  
DR. C. E. WAGNER, Hennessey, Okla.

WANTED.—To furnish every beekeeper within 500 miles of Boise, Idaho, with the best and cheapest bee supplies on the market, quality considered. Send me your order or a list of your requirements for 1916. Our catalog and price list will be mailed to you free. Order early and get the discounts.

C. E. SHRIVER Boise, Idaho.

### PATENTS

PATENTS THAT PAY: \$625,812.00 clients made. Protect your idea. Send data. Advice and two wonderful Guide Books free. Highest reference.  
E. E. VROOMAN & Co., 834 F., Washington, D. C.

## REAL ESTATE

**FOR SALE.**—205 acres fine black land, and 175 colonies bees. Will sell a part or all of bees without land. Apply to **A. H. COCKRELL**, Campbellton, Tex.

**PROFITABLE LITTLE FARMS IN VALLEY OF VIRGINIA**, 5 and 10 acres tracts, \$250 and up. Good fruit and farming country. Send for literature now. **F. H. LABAUME**, Agr. Agt. N. & W. Ry., 246 Arcade Bldg., Roanoke, Va.

**FOR SALE.**—A well-located, highly improved farm of 41 acres, near Elizabethtown, Ky., together with crops, nine head of stock, 20 colonies of Italian bees, tools, etc., to be sacrificed at a bargain of \$2800 if taken at once. **LORETTO HEAD**,  
Box 63, Rt. 3, Elizabethtown, Ky.

A small farm in California will make you more money with less work. You will live longer and better. Delightful climate. Rich soil. Hospitable neighbors. Good roads, schools, and churches. Write for our San Joaquin Valley illustrated folders free. **C. L. SEAGRAVES**, Industrial Commissioner A. T. & S. F. R'y, 1934 R'y Exchange, Chicago.

For sale in the Okanagan Valley, British Columbia, Canada, ten-acre lot, surrounded with orchard, apiary of 50 hives, supers, etc., extractor, honey-house, bee-cellar, 10-room house with furniture; large barn, one horse, two sets harness, buggy, democrat, cutter, bobs, workshop, hen-house, woodshed, 12 cords firewood; no mortgage; dry climate; plenty irrigation; with crop; instant entry. \$5000 cash. Address "MANAGER,"  
V Glenalva Apiary, Lavington, B. C., Canada.

## BEEES AND QUEENS

**Finest Italian queens.** Send for booklet and price list. **JAY SMITH**, 1159 De Wolf St., Vincennes, Ind.

**Well-bred bees and queens.** Hives and supplies. **J. H. M. COOK**, 70 Cortlandt St., New York.

**FOR SALE.**—Untested golden Italian queens, 60 cts. **J. F. MICHAEL**, Winchester, Ind.

**Rhode Island northern-bred Italian queens**, \$1. Circular. **O. E. TULIP**, Arlington, R. I.

**Golden all-over-queens of quality.** Untested, 75 cts.; tested, \$1.50. **A. O. HEINZEL**, Rt. 3, Lincoln, Ill.

**Fine three-banded Italian queens.** Circular and price list free. **J. L. LEATH**, Corinth, Miss.

**FOR SALE.**—40 stands bees in section hives, eight-frame. **THOMAS HARTLEY**, Sutherland, Fla.

**FOR SALE.**—Italian queens; untested, 50 cts. each. **E. A. SIMMONS**, Greenville, Ala.

**Four frames bees, brood, honey,** with tested Italian queen, \$4. **S. COLLYER**, box 183, Ossining, N. Y.

**FOR SALE.**—600 colonies well-kept bees. All modern equipment. Write  
**WM. CRAVENS**, Rt. 7, San Antonio, Tex.

**Three-banded Italian Queens**; 1, \$1.00; 6, \$5.00; 12, \$9.00; Moore's strain. Satisfaction guaranteed. **F. L. JOHNSON**, Mt. Airy, N. C.

**Vigorous, prolific Italian queens**, \$1; 6, \$5. My circular gives best methods of introducing.  
**A. V. SMALL**, 2302 Agency Road, St. Joseph, Mo.

**Bright Italian queens for sale** at 50 cts. each. Safe arrival and satisfaction guaranteed.  
**H. K. TURNER**, Rt. 4, Greenville, Ala.

**Bright Italian queens** at 60 cts. each; \$6.00 per doz.; \$50 per 100. Safe arrival and satisfaction guaranteed. **W. W. TALLEY**, Rt. 4, Greenville, Ala.

**Italian queens bred for their honey-gathering qualities.** One, \$1.00; six, \$5.00.

**EDITH M. PHELPS**, Binghamton, N. Y. East End.

**FOR SALE.**—Five two-story, two single colonies, in fine condition. Fair price.

**Mrs. H. CHRISTMAN**, Middle Hope, N. Y.

**FOR SALE.**—Three-banded Italian queens, no disease. Tested, \$1.00; untested, 75 cts.; 6 for \$3.75. **MISS BIRDIE CULBERSON**, Rt. 2, Siler City, N. C.

**ITALIAN QUEENS.**—Golden or leather colored; 75 cts. each; \$1.25 for 6; \$8.00 per doz. Tested, \$1.50. **NORDLING APIARIES**, Button Willow, Kern Co., Cal.

**Italian Queens of Quality**; satisfaction guaranteed. Introductory price 60 cts. each.

**W. D. ROTH**, Earlington, Pa.

**Golden and three-banded Italians**; 1 untested, 85 cts.; 6, \$4.80; 1 tested, \$1.25; 6, \$7.20. Satisfaction guaranteed. Bees, \$1.25 per lb.

**D. L. DUTCHER**, Bennington, Mich.

**Southwest Virginia five-band Italian queens**, the fancy comb-honey strain, gentle to handle. They will please you. Try one. \$1.00 each.

**HENRY S. BOHON**, Rt. 3, Box 212, Roanoke, Va.

**FOR SALE.**—Golden Italian queens, select tested, \$1.25; tested, \$1.00; untested, 60 cts. each; dozen, \$7.00; select untested, 70 cts.; dozen, \$8.00; no foul brood. **D. T. GASTER**, Rt. 2, Randleman, N. C.

**Fine three-banded untested Italian queens**, northern bred, each 80 cts.; ten for \$7; fifty for \$30. Safe delivery guaranteed. **M. H. HUNT & SON**,  
N. Cedar Ave., Lansing, Mich.

**H. C. Short**, queen-breeder, formerly of Winchester, O., is now with **W. D. Achord**, Fitzpatrick, Ala. We will appreciate the patronage of Mr. Short's customers.

**FOR SALE.**—Golden Italian queens that produce golden bees; for gentleness and honey-gathering they are equal to any. Every queen guaranteed. Price \$1. 6 for \$5. **WM. S. BARNETT**, Barnetts, Va.

**Golden Italian queens by June 1.** Untested queens, 75 cts. each, or \$8.00 per doz.; tested, \$1.25 each or \$12 per doz. Purely mated. Guaranteed. Send for circular. **J. I. DANIELSON**, Rt. 7, Fairfield, Ia.

**QUEENS OF QUALITY.**—The "genuine quality" kind of dark Italians, bred for business. Untested queens by return mail, 75 cts. each; \$8.00 per doz. Circular. **J. I. BANKS**, Dowlletown, Tenn.

**Extra select untested golden and three-banded Italian queens**, 50 cts. each; 6 for \$2.95; 12 for \$5.75. Satisfaction guaranteed.

**G. H. MERRILL**, Pickens, S. C.

**FOR SALE.**—350 strong colonies with extracting and comb equipment; unlimited range; continuous flow; water-white honey; no disease.

**J. O. BAIRD**, Rt. 1, Haines, Oregon.

**Golden Italian queens that produce golden bees**; the highest kind, gentle, and as good honey-gatherers as can be found; each, \$1.00; 6, \$5.00; tested, \$2.00; breeders, \$5.00 to \$10.00.

**J. B. BROCKWELL**, Barnetts, Va.

**Large well-bred three-band Italian queens by return mail**; 1, \$1.00; 6, \$5.00; 12, \$9.00; guaranteed purely mated, select tested, \$1.50; full colonies, 10-frame, \$8.00; 8-frame, \$6.00, queen included.  
**S. G. CROCKER, JR.**, Roland Park, Md.

**Golden Italian queens, bred strictly for business**, that produce a strong race of honey-gatherers. Untested queens, 75 cts. each; \$8.00 per dozen; \$60 per 100. Prompt service and satisfaction guaranteed. **L. J. DUNN** box 3383, Rt. 6, San Jose, Cal.



**MILLER'S STRAIN ITALIAN QUEENS.**—Still on the map with a few choice untested queens at \$1.00 each the rest of the season. J. F. MILLER,

1214 Ozan St., Pittsburg, Pa.  
Formerly of Brookville, Pa.

**FOR SALE.**—Fifty colonies of bees in 10-frame L. hives, combs built on full foundation; 120 Danz. comb-honey supers; 1 Cowan 2-frame extractor; 8 Holtermann winter cases; a lot of bee-books, etc.  
FRANCIS W. GRAVELY, Stockton, Va.

**GRAY CAUCASIANS.**—Early breeders, great honey-gatherers; cap beautifully white; great comb-builders; very prolific; gentle; hardy; good winterers. Untested, \$1; select untested, \$1.25; tested, \$1.50; select tested, \$2.00. H. W. FULMER, Andalusia, Pa.

**FOR SALE.**—Italian bees, 1 lb. with queen, \$2.25; one-frame with queen, \$2.00. Queens, 75 cts. each. Safe delivery guaranteed; 30-page catalog with beginner's outfit for stamp. THE DEROY TAYLOR CO., Newark, N. Y. (formerly Lyons).

**FOR SALE.**—Fine Italian queens, untested, 75 cts. each or 6 for \$4.00; select, \$1.00 each, or 6 for \$5.00. Strong three-frame Italian bees with good queens, \$4.00 each. All bees and queens healthy, free from all disease. Satisfaction guaranteed in all cases. EDW. A. REDDOUT, box 43, Lysander, N. Y.

**Carniolan, golden, and three-banded Italian queens** Tested, \$1.00; untested, 75 cts.; 6, \$4.20; 12, \$7.80. ½-lb. bees, 75 cts.; 1 lb., \$1.25; nuclei, per frame, \$1.25. No disease; everything guaranteed. Write for price list. C. B. BANKSTON, Buffalo, Leon Co., Tex.

My bright Italian queens will be ready to ship April 1, at 60 cts. each; virgin queens, 30 cts. Send for price list of queens, bees by the pound, and nucleus. Safe arrival and satisfaction guaranteed. M. BATES, Rt. 4, Greenville, Ala.

**FOR SALE.**—Three-banded, hardy, northern-bred Italian queens, bred from the best honey-gatherers obtainable. Untested, \$1.00; select tested with wing clipped, \$3.00; also Golden and Carniolans at same prices. F. L. BARBER, Lowville, N. Y.

See our large advertisement elsewhere. Why pay more when you can get from us better queens for less money? We guarantee our queens to be as good as any produced North, South, East, or West. Try them. M. C. BERRY & Co., Hayneville, Ala.

**Maine-hardy Italian queens, leather-colored, gentle.** Hardy, rustlers. Untested, 75 cts.; select untested, \$1.00; tested, \$1.25; select tested, \$1.50 to \$2.00. No disease. Satisfaction guaranteed.

A. J. SEAVEY, Rt. 2, Farmington, Maine.

**GOLDEN ITALIAN QUEENS.**—Bred from a strain of great honey-gatherers, gentle and prolific. Untested, one, 75 cts.; 6, \$4.25; 12, \$8.00; 50, \$32.50; 100, \$60.00. All orders promptly filled and safe arrival guaranteed. L. J. PFEIFFER, Rt. 15, Los Gatos, Cal.

**Choice Italian Carniolan or Caucasian queens;** Untested, 75 cts.; tested, \$1.25; breeding queens, \$2.50; virgins, 40 cts. each; 3 for \$1.00. Immediate delivery. C. W. FINCH, 1451 Ogden Ave., Chicago, Ill. Phone Haymarket 3384.

**Queens for requeening.** Best on market. One untested, \$1.50; 12, \$12.00; one tested, \$2.00; 12, \$18.00; one select tested, \$3.00; 12, \$24.00. Special low price on 50 or more. Write. Safe delivery and satisfaction guaranteed.  
THE J. E. MARCHANT BEE & HONEY CO., Canton, O.

**TENNESSEE-BRED QUEENS!** My three-band strain that has given such universal satisfaction for over 40 years. Orders filled promptly or money returned by first mail. 1000 nuclei in use. Tested, in June, \$1.75; untested, \$1.00; in July, \$1.50 and 75 cts. Postal brings circular.

JOHN M. DAVIS, Spring Hill, Tenn.

**QUEENS**—From a strain of Italians, wintered for thirty years in the foothills of the Adirondack Mountains out of doors. Hardy, gentle, industrious, and fine resisters of disease. \$1.00 each, or \$9.00 per dozen; also nuclei and full colonies.

CHARLES STEWART, box 42, Johnstown, N. Y.

**Phelps' Golden Italian Queens** combine the qualities you want. They are great honey-gatherers, beautiful and gentle. Mated, \$1.00; 6, \$5.00; tested, \$3.00; breeders, \$5.00 and \$10.00. C. W. PHELPS & SONS, Wilcox St., Binghamton, N. Y.

**FOR SALE.**—Good Italian queens, untested, 75 cts.; tested, \$1.00; nuclei, 2 frames, \$3.00; 1-lb. package, \$2.00; 2-lb. package, \$3.00, with untested queen. Will be ready to send out about April 1. G. W. MOON, 1904 Park Ave., Little Rock, Ark.

**BY RETURN MAIL.**—Young tested queens, \$1.00; \$12.00 per dozen; untested, 75 cts.; \$7.00 per doz. We breed the three-band Italians only, and we breed for the best. We have never had a case of foul brood in our apiary, and we guarantee every queen sent out by us. J. W. K. SHAW & Co., Loreauville, La.

**QUEENS.**—Improved three-banded Italians, bred for business, June 1 to Nov. 15, untested queens, 75 cts. each; dozen, \$8.00; select, \$1.00; dozen, \$10.00; tested queens, \$1.25 each; dozen, \$12.00. Safe arrival and satisfaction guaranteed.

H. C. CLEMONS, Rt. 3, Williamstown, Ky.

**NOTICE TO HONEY-PRODUCERS.**—We will send by return mail three-banded Italian queens at 50 cts. each. Lots of 25 or more, 45 cts. each. A choice lot of select tested at \$1.00 each; 25 or more, 75 cts. each. No disease. Safe arrival guaranteed.

MARCHANT BROS., Union Springs, Ala.

**FOR SALE.**—Three-banded Italian queens and bees from the best honey-gathering strains obtainable. Untested queen, 75 cts.; 6, \$4.25; 12, \$8.00; tested queens, \$1.25; 6, \$7.00; 12, \$12.00. For select queens add 25 cts. each to the above prices. For queens in quantity lots, or bees by the pound, write for prices. ROBT. B. SPICER, Rt. 181, Wharton, N. J.

**Hollopeter's strain of three-banded Italian bees** and queens now ready. Bees, a full pound of the right kind for business, with young laying queens, 1 pkg., \$2.25; 6 pkg., \$12.50; 2-lb. pkg., with queen, \$3.25. Queens, bred for business, untested, each, 75 cts.; 12, \$8.00. Safe arrival in good condition guaranteed. Health certificate with each shipment. Circular free.

J. B. HOLLOPETER, queen-breeder, Pentz, Pa.

**PURE ITALIAN QUEENS.**—Golden or three-banded, by return mail. All queens are warranted purely mated. They are large and long lived. They have proven themselves highly disease-resistant in many localities. One select untested, \$1.00; 6, \$4.25; 12, \$8.00; 100, \$60.00. Tested, \$1.25. Bees by the pound, nuclei, colonies. Safe arrival and satisfaction I guarantee. Circular free.

J. E. WING, 155 Schiele Ave., San Jose, Cal.

**Famous Howe's, Root's, Moore's, Davis' select strain of honey-gatherers, disease-resisting.** None better for all purposes. Untested, one, 75 cts.; doz., \$7.50. Select untested, one, \$1.00; doz., \$9.00; ½ doz., \$5.00; tested, \$1.25; doz., \$10.00; select tested one, \$1.50; ½ doz., \$8.00; extra select, \$2.00. Bees by the pound, \$2.50 with queen. Honey crop short. Will have plenty of bees in June.

H. B. MURRAY, Liberty, N. C.

**Special on fine queens for my birthday.**—I shall be 39 August 7. Orders dated to me for that day will be filled any time from then on at 50 cts. each or \$45.00 per 100. Pure mating, no disease, safe arrival guaranteed; three-banded only; no goldens.

First of all, I want to say your queen is all as a breeder. I have about 75 of her daughters, and their energy is unlimited, and of course, that is the most important point. JOE C. WEAVER, Cochrane, Ala.

Breeders, \$5.00 each; tested, \$1.25 each. If you have requeening to do, try some of my queens. I really think they are extra.

CURD WALKER, queen-breeder, Jellico, Tenn.

Leather-colored "Nutmeg strain" queens, \$1.00; \$10.00 per dozen. Tested, \$1.50. Special price on large lots by return mail.

A. W. YATES, 3 Chapman St., Hartford, Ct.

**ITALIAN QUEENS.**—Northern-bred, three-banded, highest grade, select untested, guaranteed. Queen and drone mothers are chosen from more than 600 colonies, noted for honey production, hardiness, prolificness, gentleness, and perfect markings. Price after the first week in August, one, 75 cts.; 12, \$7; 100, \$50. Send for circular.

J. H. HAUGHEY, Berrien Springs, Mich.

The bargain of the season—listen: *The Beekeepers' Review* to new subscribers is \$1.00 per year. Ten three-banded Italian untested queens at 50 cts. each would be \$5.00. *The Review* for the last four months of this year would be 33 cts., total \$6.33. Send us \$5.00 for the *Review* 16 months, beginning with the September number, and receive 10 untested queens, mailed you direct from our breeder in Mississippi. To get this exceptional bargain, address all orders to *The Beekeepers' Review*, Northstar, Mich.

**LEATHER-COLORED ITALIANS.**—Large, vigorous, three-band Italian queens that have proven that they can stand a severe winter, last winter being a test for them. For size, beauty, gentleness, and honey-gathering qualities they will surprise you. If you have foul brood, try them. It will be half the fight. All queens are guaranteed for a period of one year from date received. If you have a special case of introduction state your case, and I will advise you how best to proceed. If they fail to please you, you get your money back. Prices: 1, \$1.00; 6, \$5.00; 12, \$9.00. No foul brood in my apiary nor near me. W. D. SELLERS, 242 Pine St., Lancaster, Pa.

**BEE SUPPLIES** Send your name for new 1916 catalog.  
Dept. T, CLEMONS BEE SUPPLY CO.,  
128 Grand Avenue, Kansas City, Mo.

## BEE SAFETY ---HOW?

—By ordering Murry's queens. I have testimonials on file that my strain of bees are strongly resistant to European foul brood, Isle of Wight disease, and paralysis. Plenty of queens ready to ship on short notice from now till Nov. 1. Safe arrival and satisfaction guaranteed. No disease of any kind in my apiaries. Three-banded Italians and Goldens. Untested, one for 75 cts.; six for \$4.00; any number over that, 62½ cts. each. Tested, one for \$1.00; six for \$5.00; over that, \$10.00 per dozen.

H. D. MURRY  
Mathis, Texas

## 45c--Golden and 3-banded Italian Queens--45c

We guarantee them to be as good as money can buy. Our breeders are of the very best, our methods are the best known. If they are not satisfactory you can get your money back for the asking. Where can you get any more for big money? Virgins, 25 cts.; untested, one, 45 cts.; 12, \$5.00; 100, \$40.00. Special offer to members of association thru their secretary. Get your secretary to write us. Queens we are offering you are choice. 1 lb. bees, \$1.25; 2 lbs., \$2.00; 1-fr. nucleus, \$1.25; 2-fr., \$2.25. Full colony, 8-fr., \$6.00; 10-fr., \$7.00. No queens at these prices. The Italian strain of bees have proven themselves able to resist foul brood to a greater degree than any other strain, and they are, therefore, the strain to buy if you have foul brood in your locality.

We also have breeders direct from Dr. Miller and can furnish queens of his strain, which is the best in the world. Start right, get some of the best in the world for the foundation of your strain.

*To inquirers:—I am rearing no queens for sale, but am keeping The Stover Apiaries supplied with breeders from my best stock; and from thence you can obtain the same queens you could get directly from me.*

C. C. Müller, Marengo, Ill., March 1, 1916.

Prices of Dr. Miller's strain: Virgins, 50 cts. each; 12 or \$5.00; Untested, 60 cts.; 12 for \$6.00. Tested, \$2.00; Select Tested, \$3.50; Breeders, \$5.00 to \$10.00. Will replace inferior queens. Capacity over 2000 per month. Safe arrival and satisfaction guaranteed.

## The Stover Apiaries, Mayhew, Mississippi



**Queens--Queens--Queens.** We are breeding from the best three-band Italian stock. Untested, 50 cts.; select untested, 60 cts.; tested, \$1.00; select tested, \$1.50 each. We have been breeding queens for more than 25 years. We guarantee safe arrival, no disease, and every one purely mated.

W. J. FOREHAND & SONS

FORT DEPOSIT, ALABAMA





## The Eyes, Ears, and Mouth are Near Together

To see birds, hear their  
music, and taste honey  
are a happy trio.

There is a new and enlarged  
**Bird Department**  
in the  
**Guide to Nature**

Send twenty-five cents for a four-  
months' trial subscription.

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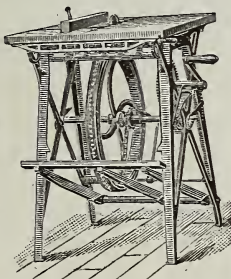
### BARNES' Hand and Foot Power Machinery

This cut represents our com-  
bined circular saw, which is  
made for beekeepers' use in  
the construction of their  
hives, sections, etc.

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Send for illustrated catalog  
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### COLORED BEE - HIVE LABELS



For tacking on to the  
hives as an aid to the  
better control of your  
bees; very durable,  
visible and attractive.  
Approved by large,  
practical bee-raisers.  
Circular and sam-  
ples free.

Arthur P. Spiller. Dept. G, Beverly, Mass.

### Kill All Flies! They Spread Disease

Placed anywhere, **Daisy Fly Killer** attracts and kills all  
flies. Neat, clean, ornamental, convenient, and cheap.



Lasts all season. Made  
of metal, can't split or  
tip over; will not soil or  
injure anything. Guar-  
anteed effective. Ask for

**Daisy Fly Killer**  
Sold by dealers, or 6 sent  
by express, prepaid, \$1.00.

HAROLD SOMENS, 160 DeKalb Ave., Brooklyn, N. Y.

## Why Not Declare War

against weak colonies, old  
queens, and diseases by buy-  
ing and requeening with my  
young, vigorous, three-band-  
ed Italians. They are bred  
for honey and gentleness.  
50 CENTS each; \$45 per 100.  
This is a first-class queen at  
a cheap price. Guaranteed  
to be as good as money can  
buy; to give perfect satisfac-  
tion, and reach you in first-  
class condition.

N. FOREHAND  
Fort Deposit, Alabama

### Zanesville Service Still Available

Effective August 1, the Zanesville Bee-supply  
Agency will be under new management on account  
of my acceptance of a position in the Home Offices  
of The A. I. Root Co. at Medina. On and after  
this date Mr. A. M. Moore, of the Central Ohio Sup-  
ply Co., will be in charge.

I want to take this opportunity to thank the many  
customers and friends whom it has been my pleasure  
to serve during a number of years for the measure  
of success and consequent promotion they have made  
possible. It is my earnest desire still to remain in  
touch with them. Let me bespeak for Mr. Moore the  
same good treatment accorded me.

As heretofore, a full line of the best bee supplies  
will be carried in stock. The new warerooms will  
be very accessibly located in the Townsend Building  
No. 7 Main St. Please note the change from our  
present location on Third St.

E. W. PEIRCE.

Orders and all communications other than those  
intended for E. W. Peirce personally (which should  
be addressed to Medina) should be mailed to

A. M. MOORE, Agent  
Lock Box 285 . . . Zanesville, Ohio

## CONVENTION NOTICES

The Western New York Honey-producers' Association will hold its annual basket picnic and field meeting on August 12, 1916, at the home and apiary of Roy Wisterman, at Dysingers Corners, N. Y., which is located on the Lockport-Akron macadam road 6 miles southeast of Lockport or 10 miles northwest of Akron, or 4 miles south of Gasport. A good program is in preparation, and an enjoyable time is anticipated. Bring your friends, your veil, and don't forget your basket lunch. All beekeepers welcome.

WILLIAM F. VOLLMER, Sec.

Akron, N. Y., July 15.

The Eastern New York Beekeepers' Association will hold a field meeting and basket picnic at the apiary of the president, W. D. Wright, at Altamont on Aug. 11. Mr. C. P. Dadant, of the *American Bee Journal*, is expected to be with us, and address us on the past, present, and future of the National Beekeepers' Association, besides other topics. There will be two sessions. All beekeepers are invited.

S. DAVENPORT, Sec.

Indian Fields, N. Y.

## TRADE NOTES

### REGULAR AND SAFETY SHIPPING-CASES.

Because of the great increase in the cost of paper in all forms we find it necessary to advance prices of the regular 24-lb. shipping-case \$1.00 per 100, and of the safety cases, including safety cartons, \$4.00 per 100. In 100 24-lb. cases there are 2400 safety cartons. The price of these cartons is advanced \$1.50 per 1000, which makes the increase for cartons alone \$3.60 per 100 cases. There is, besides, the drip paper and corrugated pads, which are now costing considerably more. These pads cannot well be dispensed with. In fact, where cartons of some kind are not used, there should be divisions in the case to protect the comb honey properly for safe shipment. See editorial on this subject in this issue.

### GLASS HONEY-PACKAGES ADVANCED.

Increased cost of materials affects glassware to such an extent that we are obliged to announce higher prices on the various glass packages listed in our catalog. The taper-panel jars are advanced 10 cts. a case, making the new price for ½-lb., 90 cts. per case; 6 cases, \$5.10; 1-lb., \$1.10 per case; \$6.30 for 6 cases. The round Federal and Tiptop jars are also advanced 10 cts. per case, making the new prices as follows:

Federal jar, \$1.20 per case of 2 doz.; 6 cases, \$6.90  
15-oz. round jar, 95 cts. per case of 2 doz.; 6 cases  
\$5.40.  
16-oz. round jar, \$1.00 per case of 2 doz.; 6 cases,  
\$5.70.  
½-lb. Tiptop jar, \$1.10 per case or \$5.50 per crate  
of 1 gross.  
1-lb. Tiptop jar, \$1.20 per case or \$6.00 per crate  
of 1 gross.  
6½-oz. tumbler, \$1.00 per case of 4 doz.; \$7.50 per  
bbl. of 40 doz.

### PREMIUM AND SQUARE JARS.

We still have 75 to 80 doz. of 1-qt. Premium jars which we offer, to close out, at 60 cts. per doz.; \$6.00 per gross. There are one dozen in a paper carton. If crated for protection in shipping, add 50c. a gross.

We have several gross of 1-lb. square jars with spring-top fastener similar to the Tiptop jar. These are worth 75 cts. per gross more than jars with cork. We offer them, to close out, at \$5.50 per gross, packed 6 doz. in a case. In our New York and Philadelphia offices we have a surplus stock of 2-lb. square jars packed 6 doz. to a case. These we offer, to close out, at \$7.50 per gross; also a limited quantity of 1-lb. with cork at \$5.00 per gross; ½ lb. at \$4.00, and ¼ lb. at \$3.25.

### TIN HONEY-PACKAGES.

New quotations received on tin cans and pails are very much in advance of former prices. We are fortunate in having a supply of 5-gallon cans, bought

before the advance, so we can continue for some time yet furnishing these cans at the present list price. We are obliged to name higher prices on the friction-top cans and pails for shipment direct from Chicago or Baltimore as follows:

2-lb. can, 500 to crate, \$16.00 per crate; 90 cts. per case of 24.  
2½-lb. can, 462 to crate, \$17.00 per crate; \$1.05 per case of 24.  
3-lb. can, 420 to crate, \$18.00 per crate; \$1.20 per case of 24.  
5-lb. pail, 200 to crate, \$13.00 per crate; \$1.00 per case of 12.  
5-lb. pail, 50 to crate, \$3.75 per crate.  
10-lb. pail, 100 to crate, \$10.50 per crate; 80 cts. per case of 6.  
10-lb. pail, 50 to crate; \$5.50 per crate.

THE A. I. ROOT CO., Medina, Ohio.

## Special Notices by A. I. Root

### PAYING BEEKEEPERS A VISIT.

I am now planning an automobile trip from Medina to Springfield, Ohio, about the time that this journal reaches you, or a little later; and along the route I might make some of the readers of GLEANINGS a call of twenty or thirty minutes if they will tell me briefly on a postal card how to reach them—that is, those of you who are along the line, on my way going or coming. Therefore if you would like to see your old friend of the Home papers for a few minutes, just send in your postal card about as soon as you get this.

### "EVAPORATED" HONEY—WHY NOT?

Something like forty years ago Mrs. Root put some honey into a shallow pan in the oven and let it stay with a moderate heat until the water was evaporated or driven out until it was a sort of candy. I remember the circumstance because of her remark that it was so "wonderfully delicious" that she and the children ate every bit of it, and did not save a particle for "papa;" but she added that she would make some more for me to try. Now, I think we all decided it was greatly superior to common honey; but I think the matter was dropped because it was sticky, and stuck the jaws together, etc. Since then at various times the matter of "honey candy" or honey evaporated until it is very thick has come up. Our friend Root, down in Florida, used for years a solar evaporator consisting of glass sashes placed over a box of shelves to hold the bottles of honey; and by this means we can, in time, get honey of almost any density.

One thing that brings the matter up just now is that I have just been considering that if we could get rid of the water in honey, or at least a great part of it, there would be a great saving in the matter of shipping. What is the use of paying freight or express charges on water? We have evaporated peaches, apricots, nectarines, and all sorts of fruit, and this effects a great saving in two ways: First, we get rid of the water; and second, we dispense with the glass or tin containers that must be used with all canned fruit. Now, why can we not do the same way with honey? Howard Calvert, the father of the baby pictured in our last issue, has submitted to me some samples of honey candy. Some of it, made of pure honey and nothing else, is hard and brittle like a stick of hoarhound candy; but in the warm damp atmosphere of this weather it soon becomes sticky on the outside, and unpleasant to handle. I am told the only remedy is to coat it with chocolate. In this way it can be handled and shipped like ordinary candy; and I believe I prefer it to any candy I ever tasted. Even some of it that was a little overheated has a delicious taste similar to caramels; and my impression is (this 26th day of July, 1916) that in the near future a great industry will be built up in shipping honey in the solid form. Even if it should be necessary to coat the outside with chocolate or some similar healthful food, even then the saving in freight and the saving in glass and tin packages would be enormous. If any of you can furnish evidence of what has already been done in this direction, I shall be very glad indeed to get it.